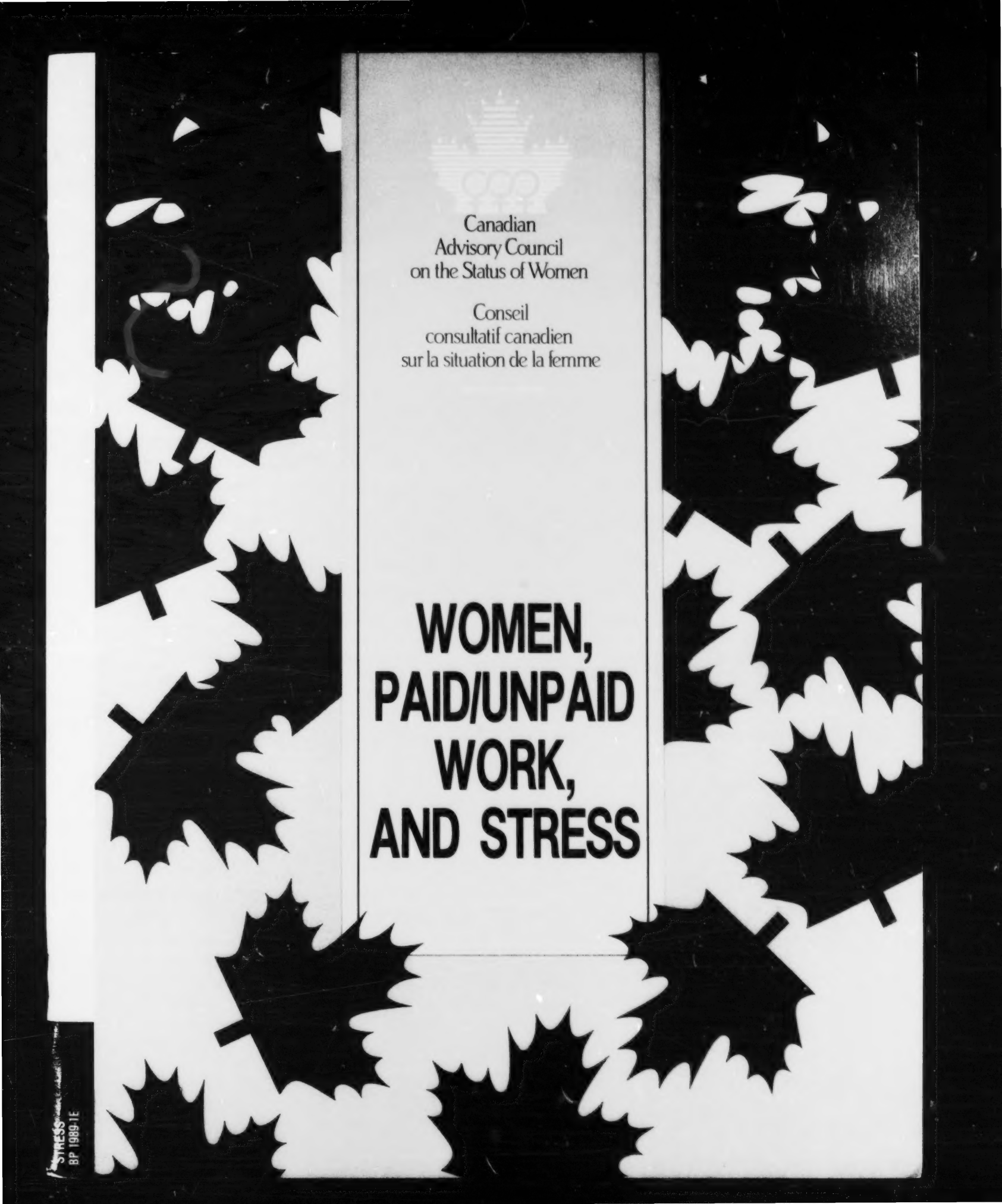

Canadian
Advisory Council
on the Status of Women

Conseil
consultatif canadien
sur la situation de la femme

WOMEN, PAID/UNPAID WORK, AND STRESS

STRESS
BP 1989-1E

89-02511/

BACKGROUND PAPER

WOMEN, PAID/UNPAID WORK, AND STRESS:
New Directions for Research

by Graham S. Lowe
Department of Sociology
University of Alberta

March 1989

Canadian Advisory Council on the Status of Women

Prepared for the
Canadian Advisory Council on the Status of Women
Box 1541, Station B
Ottawa, Ontario K1P 5R5

Background papers are prepared to inform Council members, the general public, and parliamentarians on issues being considered by the Council. They are designed to provide an initial analysis on a subject and to generate public discussion. The information contained in this background paper was provided by the author, and does not necessarily reflect the views of the Council.

Available free of charge from the
Canadian Advisory Council on the Status of Women
by quoting No. 89-S-155
(The Council reserves the right to limit quantities)

©Canadian Advisory Council on the Status of Women 1989

Cette publication existe également en version française sous le titre *Le travail des femmes et le stress — Nouvelles pistes de recherche.*

Lowe, Graham S.

Women, paid/unpaid work, and stress : new directions for research

(Background paper ; no. 1989-1)
Issued also in French under title: Le travail des femmes et le stress.
Bibliography: p. 65
"No. 89-S-155"
ISBN 0-662-16829-1
DSS cat. no. LW3-1/1989-1E

1. Women — Job Stress. 2. Job stress. 3. Sex role in the work environment. 4. Stress (Psychology). I. Canadian Advisory Council on the Status of Women. II. Title. III. Series: Background paper (Canadian Advisory Council on the Status of Women) ; no. 1989-1.

HF5548.85L68 1989 158.7'088042 C89-097053-X

TABLE OF CONTENTS

EXECUTIVE SUMMARY	i
Introduction	1
Work and Gender	1
Defining Stress	5
Theoretical Approaches to Work Stress	7
Major Sources of Work Stress	10
The Impact of Stress	12
Methodological Issues in Studying Women's Work Stress	14
The Stresses of Paid Work in the Labour Force	20
Sex Differences in Stress	23
Are Women Exposed to Unique Stressors?	30
Gender Roles and Ill Health	36
The Stresses of Women's Household and Family Work	39
Moderators in the Stressor-Strain Relationship	43
Solving the Problem of Work Stress	46
NOTES	50
BIBLIOGRAPHY	65

ACKNOWLEDGEMENTS

I would like to acknowledge Herb Northcott's advice throughout this project and his helpful comments on earlier drafts. Barb Marshall also offered valuable comments on an earlier draft. I am also indebted to Tina Head and the CACSW's anonymous reviewers for their comments, to Tim Williams and Alan Law for research assistance, and to the University of Alberta Library staff for help with computerized bibliographic searches.

EXECUTIVE SUMMARY

This background paper examines one of the leading health problems for women — work stress. It argues that the stresses women experience in their work are part of the larger problem of inequality between men and women in society. The paper uses a feminist approach, analysing the causes and consequences of stress in terms of women's experiences, needs, and interests.

Previous occupational stress research has examined paid employment, most often of men, assuming that the home is a less stressful working environment than the paid labour force. Recent studies, however, have focused increasingly on differences in the stress experiences of men and women. While this approach has advanced our understanding of the stress process, it has rarely included the stresses of women's family and household work; moreover, it tends to treat women as a homogeneous group, despite the obvious importance of such features as socio-economic status and ethnic background.

Nonetheless, the literature on job stress leaves no doubt that jobs characterized by little opportunity for decision-making, repetition, machine-pacing, close supervision, and underutilization of skills and abilities will damage workers' health, regardless of their sex. These findings demand immediate action. Specifically, job redesign and organizational reforms are the route to a stress-free, health-promoting work environment.

Current research and proposed solutions only partly address the stresses women experience. Future research must carefully examine the stresses resulting from the complex interplay of all forms of women's work, both in the household and in the labour force. From this perspective, stress becomes a key issue in public policy initiatives such as employment equity, child care, parental leave, and pension reform — as well as occupational health.

Introduction

Work stress is now recognized as a major health problem. Although stress was rarely viewed as a cause of ill health and diminished well-being among workers in the early 1970s, "job stress" and "burnout" have become catchwords in the 1980s. The media have heightened public awareness of the high personal and social costs of stress. Indeed, scientists estimate that 70 to 80 per cent of all illness can be linked, directly or indirectly, to stress.[1] Yet major gaps remain in our understanding of work stress. One of the most serious limitations of published research is its focus on males; much of it fails to include gender as a key variable.[2] However, feminist researchers have launched concerted efforts to examine work stress from the perspective of women. Some argue that stress is now the major work hazard for women.[3]

In response to these developments, the Canadian Advisory Council on the Status of Women commissioned this paper to offer an overview of recent literature on the topic of women, work, and stress. The objectives of the paper are fourfold:

- to highlight current and emerging issues in this important area;
- to evaluate whether women's needs and concerns have been addressed;
- to suggest how they might be better addressed in future research; and
- to examine the link between stress reduction and child care, employment equity, parental leave, and other public policies designed to achieve greater social and economic equality between women and men.

Work and Gender

Women's work stress is part of the larger problem of gender inequality in society. One cannot accurately understand work stress without examining the extensive gender divisions of labour in the home and the work-place. The specific kinds of work performed by women shape their experience of stress and their ability to do something about it. This paper presents a

feminist perspective, using gender as the focal point for an analysis of work stress. Women's work experiences will be brought out of the shadows and into the spotlight, at the same time revealing the sexist biases underpinning much previous research into stress.

To understand work stress from this perspective, we need to clarify how the terms sex and gender are used in this paper. Sex refers to the biological categories of male and female. Gender is the social distinction between masculinity and femininity. Sex is determined by chromosomes; gender is a product of society and culture. Thus the fact that men and women often do different work is socially, not biologically, determined.[4]

To incorporate gender as a variable in work stress research we need to be aware of how the stresses faced by women and men reflect their different work, family, and social experiences. In the past, family situation and gender roles have been used to examine women's stress, while stress research among men has been concerned with working conditions. Reminiscent of the "job" and "gender" models traditionally found in the sociology of work, this sets a double standard that inhibits a thorough evaluation of women's work **as work**.[5] An analysis that is sensitive to gender issues should apply equally to women and men.[6] Advocating separate theories of stress for each sex ignores the fact that, in many employment situations, the causes and consequences of stress are similar for all workers. Nor would separate models explain how the interaction between unpaid housework and paid employment differs for men and women, conditioning how each sex perceives, and responds to, stressful situations.

This paper attempts to integrate gender, family, and work into a unified framework for understanding women's stress. The causes and consequences of stress are investigated in terms of women's experiences, needs, and interests. This feminist perspective on work stress has clear policy implications: progress in the areas of child care, parental leave, sexual harassment, employment equity, employment standards (e.g., the minimum wage), pension reform, and occupational health and safety will bring improvements in the well-being of all working people, especially women.

Gender has been a neglected issue in work stress research, partly because studies usually have investigated paid employment. It has been commonly assumed that the workplace is a stressful environment, whereas the home is not. By definition, then, women's unpaid household and family work has fallen outside the scope of most occupational stress research. In the main, theories and methodologies have been developed by male researchers studying male workers. As in much of the past research on work-related topics, the result has been gender-blind theories that reinforce traditional stereotypes of women.[7]

Consequently, our understanding of the stress process is flawed in the following ways:

- findings from studies of men are automatically assumed to be true for women;
- issues relevant for explaining stresses in women's lives are overlooked;
- concerns important for both men and women that can be illuminated by studying women — such as how family or other home-based stressors compound job pressures — are downplayed;
- measurement techniques developed to study men may not be appropriate for women; and
- these gaps and biases may lead to intervention programs that fail to address women's needs.[8]

Mainstream academic studies increasingly have examined **gender differences** in stress outcomes. A recent review article, for example, asserted that the future of work stress rests on our ability to accurately conceptualize and measure male-female differences in stress.[9] As we shall soon see, this approach clearly demonstrates how specific types of working conditions (e.g., jobs that are routine, repetitive, closely supervised, unskilled, and machine-paced) impair the mental and physical health of all workers, regardless of sex.

However, a focus on gender differences has its limitations. For one thing, studies examining male-female differences in "job" stress rarely include sources of stress lying outside the work organization, especially in the family.[10] In addition, from this vantage point women tend to be seen as a homogeneous group (to faciliate comparisons with men). Yet at present we know little about

how class, race or ethnicity, and age interact with gender to create stressful situations for women (and for men too).[11] Finally, accurate comparisons of women and men in similar jobs and work settings (the ideal research design to test for gender differences in stress outcomes) are difficult because of gender-segregated occupational structures.

It would be far more useful to examine variations in the causes and consequences of stress, assuming that work performed by men and women is unequal. Unlike men, the majority of women in Canada work a double day. More than 56 per cent of all adult women work outside the home for pay. Even among married women with pre-school age children, about 56 per cent hold paying jobs.[12]

Women's employment is sharply etched by inequalities in pay, job benefits, and advancement opportunities. Despite growing numbers of women entering managerial and professional occupations, the majority of female employees are concentrated in low-status, low-paid, dead-end "job ghettos" in the clerical, sales, and service sectors. These three occupations combined accounted for 57 per cent of all paid female employment in 1987, compared to 25 per cent of all male employment.[13] More than one-quarter of employed women hold part-time jobs, compared to about 8 per cent of employed men. Part-time employment is growing rapidly, making it increasingly difficult for many women to find the full-time jobs they would prefer.[14] The wage gap persists, with women employed full-time for the entire year earning approximately 65 per cent of what similarly employed men earn.[15]

Women's work in the home is far less visible, though socially and economically no less important than their labour force work. Canadian estimates indicate an average 50-hour work week for full-time female homemakers. Married mothers employed full-time have the longest working hours of any group in society, despite having reduced the time they spend on child care and domestic tasks.[16] According to Martin Meissner's calculations, the unpaid domestic work of women accounts for 37 per cent of the total working hours of all Canadians.[17] In sum, "homemaker" is not only the largest occupational category for women in Canada, it is the largest occupational category overall.

We can no longer ignore the content and conditions of this work as potential stressors in the lives of women.

One reason why the stress of household work has been a neglected issue is that dominant myths present the family as a private and protected sphere, "a haven in a heartless world" where mothers and homemakers do not really "work".[18] In fact, women not only provide a wide range of goods and services for household and family use, but many also run small businesses from the home, work on an unpaid basis in a family business or farming operation, do industrial homework (e.g., sewing garments), informally exchange goods and services as a household survival strategy, and work as volunteers.[19] Furthermore, no longer can we assume that women are part of a nuclear family with a wage-earning partner. By 1986, more than 700,000 lone-parent families were headed by women. More than half of these mother-led families live in poverty.[20] Moreover, rising unemployment, especially among male industrial workers, has placed enormous psychological and economic strains on numerous working-class wives.[21]

Thus one of the most glaring gaps in the stress literature is inattention to how these various combinations of women's work — paid and unpaid, inside and outside the home — interact within different family settings to create stresses detrimental to women's health.[22]

Defining Stress

At one time or another, everyone complains about the "stress" or "pressure" of their work. Because it is so pervasive, yet so complex in its causes and consequences, stress is difficult to define precisely.[23] It is useful to distinguish between stressors and strains. Researchers generally agree that **stressors** are the stimuli, usually environmental conditions or events, to which a person may react negatively. These stressors can range from high noise levels or performing boring and repetitive tasks, to sexual harassment or the computer monitoring of productivity. In brief, stressors are the "causes".

On the other hand, **strains** are the effects or outcomes of how a person responds to a stressor; these can take the form of illness or disease. All environmental stressors elicit biochemical reactions, such as increased heart rate and blood pressure, perspiration, increased production of blood sugars and cholesterol for energy, and increased stomach acids. These are the body's mechanisms for adapting to demands imposed by one's immediate environment. Jeanne Stellman explains: "Perhaps the most meaningful way to look at the stress problem is to say that extraordinary or continually unwanted stress costs us energy, deprives us of tranquility, facilitates the occurrence of some diseases, and even outright causes others."[24]

In sum, the term **stress** refers to a **process** that incorporates the following:

- the initial stressor or pressure in the work environment;
- the stress reaction by an individual (the strain); and
- any factors that may mediate this stressor-strain relationship, either diminishing or worsening the effects.

Common mediators include age, socio-economic status, family situation, decision-making authority on the job, supportive social relationships, and individual coping resources.[25] Membership in a union might also mediate the impact of stressors, to the extent that stressful working conditions can be reduced or eliminated through collective bargaining.

There is a wide range of potential stressors, depending on the work situation. Major workplace stressors include noise, excessive workload, performing monotonous tasks devoid of mental challenge, limited decision-making, shift-work, machine-paced work, authoritarian supervision, low pay, piece-rate payment, sexual harassment, and conflicts between job and family roles. Alone or in combination, these factors interact with other aspects of a person's life to produce strains.

The ideal reaction is to minimize the source of stress, but often this is not possible. Resulting strains reflect how people cope with the demands and constraints imposed by their work. In short, stress is a function of "the

person's realization that they have a problem which they cannot adequately or easily deal with."[26] Difficulties in dealing with stress are not, however, the fault of the individual. Rather, stressful situations are those in which individuals have insufficient means at their disposal for solving problems.

If work pressures persist, an individual's overall health and well-being may suffer. Intense and prolonged stress can result in debilitating diseases and even cause death. Stressors can produce three types of negative responses:

- psychological (e.g., depression, anxiety, or job dissatisfaction);
- physiological (which can range from headaches to coronary heart disease); or
- behavioural (e.g., increased smoking, alcohol consumption, absenteeism, or marital conflict).

Occupational stress research has tended to focus more on psychological and behavioural symptoms than on physical health.[27]

Not all individuals perceive a specific work situation as stressful, nor do those experiencing stress react the same way. Individual or situational variables may influence the nature of stressor-strain relationships. For example, having to work weekends or nights might be less personally disruptive for a childless single woman than for a single parent who would have to make special child-care arrangements.[28]

But as Hans Selye argued, stress can have both positive and negative effects on human functioning.[29] Selye believed that each of us needs a certain level of environmental stimulation to perform at our best. If we continually face too few or too many stimuli, the resulting strains could damage our health.

Theoretical Approaches to Work Stress

Work stress literature contains a diversity of theoretical perspectives. No consensus exists among researchers about which theory best explains the stress process. Many studies merely describe how specific stressors are corre-

lated with certain ill-health symptoms, without the guidance of a particular theory. Early thinking was greatly influenced by Hans Selye's pioneering research on the biological basis of stress.[30] According to Selye's General Adaptation Syndrome, the human body responds to any environmental demand imposed upon it in three stages: alarm, resistance, and exhaustion. If our adaptive mechanisms fail at the resistance stage, and the body's defences become exhausted, then disease can result. Seyle distinguished the positive stresses of daily life, which promote optimum functioning, from stresses that produce disease, the latter being called "distress".

Selye's biological model has been eclipsed by newer theories emphasizing the importance of psychological and social factors in the stress process. For our purposes, it is useful to distinguish two major perspectives in the current literature: the psychological or individualistic, and the organizational or structural.[31]

Psychological approaches examine individual reactions, adaptations, and coping behaviours. More specifically, the psychological model views stress as a person's psycho-physiological reaction to a perceived imbalance between environmental demands and his or her ability to cope.[32] The dominant perspective in North American stress research is the "person-environment fit" theory developed at the University of Michigan.[33] Resulting intervention strategies are influenced by clinical psychology, often attempting to help individuals "manage" stressful situations better. Some of the University of Michigan research does, nonetheless, advocate organizational reforms to achieve a better "fit" between the needs of individual workers and the work environment.[34] Carrried to their logical extreme, however, the psychological assumptions of the person-environment fit model lead to a "blame the victim" ideology, attributing stress problems to a person's psychological vulnerability or inability to cope.

In contrast, organizational perspectives identify stressors in task content, organizational structure, ergonomic design (whether machines and equipment are consistent with human psychological and physiological needs), and the overall work environment. Perhaps the most useful organizational

approach examines the interaction between job demands and a worker's discretion to decide how to respond to these demands. This structural view of stress shifts our attention away from individual stress reactions to the objective features of the work situation. The key issue is the amount of control individuals can exercise during the course of their work. Common solutions proposed by this type of research involve job redesign and organizational change.

These two basic approaches are not mutually exclusive. Indeed, they agree that certain working conditions are highly stressful. For example, any job characterized by work overload, under-utilization of one's skills and abilities (underload), or conflicting demands will likely be stressful. The models disagree, however, on why environmental demands produce strains. According to the person-environment fit model, key components of the stress process are an individual's perception of the situation and her or his capacity to cope with pressure. Many studies using an organizational approach view a person's decision-making authority as the crucial link in the stressor-strain causal chain.

Even though the organizational perspective was developed to study paid employment, it has direct relevance for women's work situations. Regardless of the specific worksite or task, we can determine whether the work process is organized to give workers active control over the demands of their jobs. Robert Karasek illustrates this concept by comparing the corporate executive and the assembly-line worker. Each experiences high job stress, but their job satisfaction differs greatly because the former has lots of discretion in deciding how to deal with pressures.[35] Hence the distinction between "active" and "passive" jobs. Accordingly, "passive" jobs impose high demands without providing sufficient decision-making latitude to allow the worker to respond effectively. Stress reduction strategies therefore advocate expanding employee control through decision-making.

Karasek's model is useful for studying stress among female employees.[36] Many women's jobs impose high demands yet provide little decision-making control. Surveying job stress among 40,000 employed women, the National Association of Working Women (NAWW) concluded: "Having a high level of demands with a low level of control and say poses the worst threats

to workers' health and well-being."[37] The NAWW study found that the strongest correlation between specific job conditions and the occurrence of health problems (e.g., eyestrain, headaches, nausea, depression) was the combination of constant pressure and responsibility with little authority — "a condition true of so many women's jobs."[38]

Feminist researchers have recently extended the organizational perspective of Karasek and others to the work women perform in the home. Grace Baruch and her colleagues thus argue that a high level of psychological demands and low task control — a recipe for ill health — is typical of women's family roles: ". . . a major component of the roles of wife, mother, and homemaker is the obligation to see to it that another person — spouse, child — is well and happy. Yet in reality one has relatively little control over the welfare and happiness of another person, and such responsibility exposes one to many frustrations and failures."[39] Harriet Rosenberg, in her analysis of "motherwork", makes the point more generally: "Women as mothers are like women in many other work situations: they have the appearance of wide 'decision latitude' or control, but in reality they have little power to define their work situations."[40]

Major Sources of Work Stress

Most researchers would agree that the following factors should be examined as potential stressors. All of these have been linked empirically to poor mental health and, to a lesser degree, to diseases and behavioural symptoms of stress, such as alcohol or drug abuse.[41]

- **Environmental hazards** such as noise, poor lighting, radiation from video display terminals, air pollutants and noxious fumes, physical dangers, concerns about exposure to toxic chemicals or infectious diseases, and other generally unpleasant working conditions.

- The quality and quantity of **task characteristics**, such as work overload (having too much to do) or underload (a person's mental and physical capabilities are not optimally utilized), lack of decision-making authority, work

on a constantly moving assembly-line, and an individual's perception that the job is boring and monotonous.

- **Work schedules** requiring excessive hours, shift work (especially fixed afternoon and rotating shifts, which can have a negative impact on time-oriented bodily functions as well as on non-work social activities and relationships), involuntary part-time work, and any scheduling that is inconvenient given specific family or household responsibilities.

- **Social relationships** with co-workers, supervisors, and subordinates. Especially important are relations with supervisors (unclear and conflicting job demands, close supervision, lack of feedback, disputes), and sexual harassment.

- **Economic rewards** and career development opportunities, notably inadequate income, poor benefits (e.g., pension, holidays, medical insurance, maternity leave), promotion opportunities perceived as too slow or unfairly decided, and payment systems (piece-rate or production bonuses) that intensify the pace of work.

- **Organizational factors** such as bureaucratic, top-down decision-making; a job structure with numerous dead-end positions and little opportunity for advancement; working at the boundary of an organization isolated from feedback or communications; lack of job security; ambiguous job functions or objectives; responsibility for the well-being of others (e.g., the helping professions and childrearing); and the organizational climate or culture, which may influence how individuals solve stressful problems. Particularly salient for women is their relative number in an organization, the presence of female role models and mentors, and the extent to which equality of opportunities and rewards for women are pursued through comprehensive employment equity programs.

- Finally, the **interaction between home, community, and the workplace** may lead to conflicting roles, responsibilities, and expectations. For women, the role conflicts experienced while trying to juggle competing demands on these different fronts can be very stressful.

The studies reviewed below highlight how certain stressors have a uniformly negative impact on all individuals who encounter them, while some stressors mainly affect women. Occupational sex segregation concentrates women into a narrow range of occupations. Many female job ghettos in offices, stores, and factories have stressors typical of any low-status, poorly rewarded, routine job. The fact that these job ghettos account for most of women's paid employment suggests that, more so than men, women risk the harmful effects of occupational stress.

Other traditional areas of women's work, such as nursing, have stressors that predominantly affect women simply because few men perform these jobs. Moreover, as women move into male-dominated jobs they often encounter pressures, from male co-workers and supervisors, because of their minority status and high visibility. On a larger scale, women's stresses reflect a combination of factors:

- their subordinate position in most workplaces;
- their primary responsibility for housework and parenting; and
- the dynamics of patriarchal relations in society.

The Impact of Stress

Stress affects various kinds of people in different ways. In fact, even people exposed to the same specific work stressor may develop different symptoms be they psychological, physiological and/or behavioural.[42]

Psychological outcomes are the primary concern in occupational stress research. Poor mental health has been linked directly to monotonous, boring, and unchallenging work that is regulated by technology and deprives workers of opportunities to make decisions.[43] The major mental health consequences of stress are depression, anxiety, and job dissatisfaction.[44] Standard psychosomatic (i.e., physical diseases that have psychological origins) symptoms of stress include headache, heartburn, backache, musculoskeletal problems, generalized fatigue, sleep disturbances, loss of appetite, dizziness, and sexual problems.

Job stress, some would argue, is a contributing factor in many diseases.[45] Stressors can produce changes in heart rate, blood pressure, and other immediate **physiological** responses indicated by biochemical measures such as levels of cholesterol, cortisol, or catecholamines. If they are chronic and intense, these reactions may lead eventually to a variety of diseases, such as coronary heart disease (CHD), hypertension, or peptic ulcers. However, the evidence on the relationship between stress and CHD is far from convincing. Moreover, there is no agreement on which specific stressors may constitute risk factors in CHD.[46]

Behavioural changes associated with stress include reduced work productivity, task errors, absenteeism, accident proneness, increased smoking/alcohol/drug abuse, violent behaviour, diminished quality of social relationships with family and friends, and low participation in community affairs.

Evidence of these psychological, physiological, and behavioural outcomes comes mainly from studies of males. This male bias raises some important questions.

- Which specific job characteristics and working conditions are stressful for female and male workers alike?
- How do we know whether these same objective stressors in the content, design, and immediate environment of a particular job are experienced similarly by men and women?
- To what degree do women and men differ in the types, incidence, and severity of their stress reactions?
- When women's total workload and responsibilities are taken into account, what is the cumulative impact of stress on their general well-being?

Before turning to these questions, we will outline some of the methodological issues encountered in studying women's work stress.

Methodological Issues in Studying Women's Work Stress

Developing an understanding of work stress that takes account of gender differences rests in part on sound research design and accurate measures. We want to be able to examine in detail how particular groups of women, previously neglected by researchers, experience work stress. We also need to compare systematically their differences and similarities to men with regard to stress exposure and ill-health outcomes. Equally important is investigating the incidence and severity of stress-related illnesses among different groups of women.

Sexist methodological biases found in previous stress research have either ignored or distorted women's stress experiences. But as will become clear, some of the methods and measures from mainstream research are as valid for women as they are for men. However, documenting the stress problems of specific groups of female workers may necessitate innovative new measures and approaches. At a more general level, women's stress is but one manifestation of the unequal division of labour between the sexes in the workplace and in the household. Men are on the other side of these gender divisions as beneficiaries of women's subordinate and multiple work roles. To treat gender as a variable in the fullest sense thus requires methods and measures capable of tapping the wide range of work stresses experienced by both women and men. Otherwise we may run the risk of using a "gender" model to study women's work stress and a "job" model for men's, resulting in a fragmentary understanding of how work stress affects either sex.[47]

The major methodological limitation in all stress research is that most study designs are cross-sectional and retrospective. That is, they examine individuals at one point in time and gather data on past work and health. At best, these studies can only correlate specific work stressors with ill-health symptoms. They cannot determine whether these stressors actually cause particular health problems. Beyond this major limitation, reliance on small and non-representative samples makes generalizations risky. Consequently, we are left with an incomplete picture of the causes of stress that is open to differing interpretations.[48]

Methodologically speaking, the strongest studies are longitudinal and prospective, following the same individuals over a period of years. By assessing life situations and stresses repeatedly, this type of research design can pinpoint groups of individuals experiencing moderate to high stress levels over time and who are therefore at the greatest risk of illness and disease.[49] Longitudinal studies can also show how perceptions or experiences of stress differ between and among the sexes in the context of changing work, family, and other environmental conditions. A good example of this type of research is the Framingham Heart Study, discussed in more detail below. But longitudinal studies are costly and complicated endeavours. Furthermore, given that few studies examine either women workers only or males and females together, basic descriptive research outlining the incidence, sources, and nature of stress would be a useful first step.[50]

Stress responses can be measured in four ways:

- **self-reported** (e.g., an individual's appraisal of a stressor, coping, and mental and physical states);
- **behavioural** (e.g., absenteeism, visits to a doctor, use of non-prescription drugs);
- **physiological** (e.g., heart rate, blood pressure, frequency of illness); and
- **biochemical** (e.g., changes in levels of epinephrine, norepinephrine, corticosteroids, and other hormones affected by stress).[51]

Most studies of psycho-social stress tend to rely upon self-reports. Researchers assume that self-reports can accurately document the relationship between objective working conditions and a person's subjective reaction to these conditions. Yet this approach is overly subjective: "work conditions are interpretable only through the eyes of the individual worker and stress becomes a function primarily of individual perceptions, needs, and abilities."[52] Researchers need to be aware that self-reports may involve defensive distortions by individuals, intentional or not, or reflect their adaptation to a specific work environment. Furthermore, workers may not see the hazards in a job that, by objective criteria, may be dangerous and stressful.[53]

Accurate research results therefore depend upon the type of self-reports used, as illustrated by the 1984 survey of women and stress conducted by the National Association of Working Women.[54] The questionnaire asked respondents to rate the degree of stress in their job. Paradoxically, women in lower-level clerical, service, and blue-collar jobs did not describe their jobs as very stressful, despite having a high incidence of stress-linked health problems. The researchers therefore distinguish between "apparent" stressors, which workers themselves find stressful, and "hidden" stressors, which are not perceived by workers as hazardous to their health. Challenging and skilled jobs involving decision-making (e.g., management or professional occupations) were more readily reported to be "stressful". In contrast, boring jobs that provided little decision-making autonomy were less likely to be described as stressful — despite posing greater risks to workers' health.

This example underscores the importance of using indicators with good validity and reliability (i.e., they consistently measure what the researcher intends them to, over time and across different groups) to document the presence of stressors. Researchers also agree on the need for multiple measures of stress and its health consequences, regardless of the specific groups being examined.[55] Simply asking employees if their job is stressful clearly is inadequate, given the complex causes and effects of work stress.

In sum, having individuals describe specific stressors in their work environment, and having them report their somatic and psychological states and how they cope with job pressures, constitutes a basic — although imperfect — data collection strategy in most research. More problematic is the specific self-report measures used and whether they are sensitive to differences between the sexes in working conditions and stress experiences. A few examples will highlight the necessity of devising gender-sensitive measures.

Constructing a feminist perspective on work stress means accurately tapping the wide range of stressors women encounter in their work. This was the approach taken by Ann Oakley in her path-breaking study of female homemakers, which used interviews to document the nature of housework.[56] Psychologists have used the insights of Oakley's qualitative research to construct

the Home and Employment Role scales (HER).[57] These scales quantitatively measure attitudes towards employment and domestic roles, as well as the strains created in coping with both roles (i.e., their interaction), among employed mothers with dependent children. Their purpose is to probe more deeply and in greater detail the stresses experienced by this growing group of women.

Another new measure of how stress affects women is based on the assumption that, unlike most men, daily "hassles" — relatively minor but chronic stressors that are irritating, frustrating, and distressing — are related to negative health outcomes. Marcia Killien and Marie Annette Brown asked a sample of women, "What went wrong today?", then asked how they dealt with these problems. Answers covered a 15-day period and were analysed to determine how various combinations of marital, family, and employment situations affected the types of hassles experienced and subsequent coping strategies.[58]

By any standard, nursing is a high-stress occupation. Researchers have attempted to identify the underlying causes of nursing stress in the nature of patient care and the organization of medical work.[59] For example, a national study of New Zealand nurses devised a scale to measure the causes of, and variations in, nursing stress using nurses' perceptions of their work.[60] The procedure is a sound one: nurses were interviewed and a list of about 800 potentially stressful situations compiled. After these were grouped into 53 categories, a national sample of nurses rated the situations on a five-point scale in terms of how tense each situation had made them feel over the past three months. This grounded approach to measurement development is especially useful when studying women in jobs previously neglected by researchers. However, given that a small proportion of nurses are male, if the scale intends to document the stresses of nursing work then it must be validated for male employees too; otherwise the relative experiences of the sexes in this regard will not be known.[61] Ideally, this scale should be supplemented with measures of non-work stressors.

Depending on the research question being addressed, it may be useful to combine qualitative and quantitative measurement techniques. For example, Cary Cooper and Marilyn Davidson's study of male and female managers in

Britain began with in-depth, unstructured interviews with 60 female managers at various levels.[62] The researchers asked women managers to describe the pressures and stresses they faced. The interviews identified differences in stressors and their impacts for women at various managerial levels. A mail questionnaire then surveyed the stress problems and ill-health consequences experienced by both female managers and their male colleagues. Female managers, for example, reported more psychosomatic illness, whereas their male colleagues drank more alcohol. The interviews also provided personal accounts of how female managers, who often felt unable to relieve job pressures by taking time off, struggled to keep their jobs from dominating their lives. As one female manager put it: "I try very much to leave my job at the office and not to take it home. I am lucky having a young family as I enjoy my daughter. When I am putting her to sleep sometimes I think, 'What am I getting so worked up about, this is what life is about, this is what love is about'."[63]

We must also be aware of the possible sex biases in some of the standard measures used in stress research. Depression, for example, is probably the most common indicator of the negative impact of stress on mental health. Epidemiological studies have found that women, regardless of their employment status, register higher scores on depression scales than men. Yet other research suggests that much of women's depression may result from relatively common and clinically trivial stress symptoms, such as changes in mood.[64] This systematic measurement error has produced biased estimates of differences between the sexes by failing to control for minor psychological stress symptoms associated with mood variation.

Another example of measurement bias can be found in studies of behavioural patterns associated with a high risk of coronary heart disease (CHD). One prominent theory argues that Type A individuals are competitive, aggressive, restless, and tense. Individuals with these behaviours are more prone to heart disease than those with an easy-going Type B personality. Yet the entire theory rests on evidence from studies of middle-aged, middle-class American males who were typically professionals or managers. Extreme aggressiveness, competitiveness, and success-striving characterize this social group.

What the theory may be describing, then, is how some middle-class American white males are socialized.[65]

Only recently have Type A patterns in women been studied, notably among female managers. The expectation is that women, who are assumed to be more Type B, will take on Type A attributes as they enter male-dominated managerial and professional careers. A likely consequence, it is argued, will be rising female rates of CHD.[66] A major difficulty in studying sex differences in Type A coronary-prone behaviour is that the Structured Interview and the Jenkins Activity Survey — the basic measures of Type A behaviour — were developed for male populations. As such, they are not valid predictors of CHD in women.[67] In light of these criticisms, accurate behavioural measures for women are needed to determine the differential effects of gender socialization, organizational position, and the pressures of family life on coronary-prone behaviours among women and men.[68]

More generally, even in situations where men and women are performing the same tasks, women face a host of unique stressors. To anticipate our discussion of this issue, these stressors include:

- heavy responsibilities for childrearing and household work;
- sexual harassment;
- sex discrimination in hiring, promotion, job assignments, performance evaluations, and rewards; and
- the pressures of token status in non-traditional occupations.

Women also face ergonomic stressors resulting from work environments and equipment that were designed physiologically for men.[69] These sex-specific stressors must be carefully measured before we can achieve a fuller understanding of women's work stress.[70]

The Stresses of Paid Work in the Labour Force

We already know a good deal about which specific job conditions are stressful and must therefore be changed to protect the health of workers. Highly routinized, machine-paced jobs offering limited scope for decision-making are universally stressful. For example, research examining automated letter-sorters in both Canada and the United States shows that machine-pacing negatively affects job satisfaction, mental health, and physical health — regardless of the sex of the worker.[71] These findings corroborate numerous Scandinavian studies, mostly of males, focussing on the discrepancy between job demands and a worker's decision-making discretion.[72] All these investigations reveal that jobs with high task demands and little employee decision-making latitude create stress by violating human needs for autonomy and self-expression.[73]

Early studies of job stress among males identified certain high-stress occupations. A comparison of men in 23 occupations found that machine-paced assembly-line workers had the worst job conditions and the highest overall stress levels.[74] These jobs underutilize a person's skills and abilities, are repetitive and routine, offer little challenge or scope for making decisions, and are closely supervised. In combination, these conditions take a major toll on workers' health.

Women also work on assembly-lines, especially in light manufacturing industries. But the massive economic restructuring of the last decade has accelerated the decline of older mass-production manufacturing industries. The major sources of employment growth are in white-collar service-sector jobs, where the majority of women work. In these sectors, the micro-electronics revolution has created working conditions strikingly similar, and certainly just as stressful, as those on a factory assembly-line. In short, automation and a booming service sector have combined to expose growing numbers of women to major stressors.

The rapid spread of video display terminals (VDTs) exemplifies these trends. A national study conducted by the Canadian Labour Congress documents that routine data entry and processing work on VDTs is especially stressful.[75] The study examined 2,330 office workers, 65 per cent of whom were female. It found that VDT operators worked longer days, were more likely to work shifts, and reported more restricted work postures (70 per cent sat almost all the time) than the comparison group of office workers who did not use VDTs. Specific groups of VDT users, namely airline reservation agents and telephone operators, spent seven or more hours daily on these machines.

Stress-related health problems, muscular discomfort, and eye and vision problems were more common among VDT users, but were also prevalent among non-VDT office workers.[76] Respondents, such as telephone operators, who used VDTs intensively were two to four times more likely to have experienced any given health symptom than workers using VDTs in professional or technical positions. Workers in VDT jobs were more likely than non-VDT users to report that work contributed to their health problems. Usually, they blamed the VDTs' poor ergonomic design, a lack of physical mobility, and performing closely monitored routine tasks.

Using a VDT more than four hours daily, or for more than one hour at a stretch without a break, was strongly associated with increased eye and vision problems, as well as with muscular and stress symptoms on a daily basis. These health problems were more prevalent among women because of their segregation into jobs requiring intensive VDT use. Workers with more than one year of experience on VDTs had the worst health problems, suggesting that chronic fatigue takes up to a year or more to develop. Yet considering how VDT work diminished their well-being, it is quite remarkable that VDT operators were only slightly less satisfied with their jobs than were other workers.

The stressful effects of VDT work have been corroborated in other studies.[77] A study of VDT operators in the San Francisco Blue Cross office by the U.S. National Institute of Occupational Health and Safety concluded that these workers had higher stress levels than any other group, including

air traffic controllers. The first study to document a link between VDT use and chronic health problems examined telephone operators in North Carolina, finding that 20 per cent of them experienced angina after four or more hours on a VDT. Heather Menzies found high rates of absenteeism and sedative use in an informal study of word processor operators in a Canadian government centralized word-processing unit. "Some women regularly burst into tears," observed Menzies, "others chattered to their machines."[78]

An insidious form of stress ushered in by the computer age is the electronic monitoring, pacing, and evaluation of employee productivity. This truly Orwellian form of constant surveillance, increasingly used by management, can impose intense performance pressures upon the telephone operators, data entry clerks, word processor and other VDT operators, and airline reservation agents.[79]

The crux of the problem is not VDT technology, but how management chooses to organize work around these machines. All too often, managers strive to maximize the use of technology without considering the implications for workers' psychological and physical health.[80] The result is work organization defined by monotonous and repetitive tasks, social isolation, constant productivity pressures imposed by supervisors and machinery, and little opportunity for human growth and development through one's work. Compounding these problems, VDT operators often are required to spend most of their working day sitting in one position on chairs and at work stations not designed to ergonomic standards, staring at screens for long periods under poor lighting conditions.[81]

To summarize, these well-documented stresses of VDT work demand immediate solutions. This requires upgrading the variety, challenge, and decision-making control of VDT workers and designing equipment and work stations according to ergonomic standards.

In this section we have drawn a direct parallel between the stressful effects of traditional male blue-collar jobs, notably on an assembly-line, and highly automated office and service tasks performed mainly by women. We have

implied that specific working conditions, not the sex of the worker, are crucial in explaining stress outcomes. Accordingly, female assembly-line workers in a factory and male airline reservation agents using VDTs will develop ill-health symptoms similar to those of their co-workers of the opposite sex. What will differ is the way the individual's household situation interacts with the pressures of employment. Moreover, the dynamics of workplace relations between the sexes may create additional stressors for women, such as sexual harassment.

In the next section we examine the research evidence regarding sex differences in perceptions of, and reactions to, workplace stressors. The central theme is how job conditions have a direct impact on the well-being of all individuals employed outside the home. By underlining the important role of specific job conditions in creating stress, the evidence also refutes the myth that some workers, because they are not physically or mentally fit to cope with the demands of their jobs, have only themselves to blame for stress-induced illness.

Sex Differences in Stress

Studies of sex differences in occupational stress represent a major improvement over male-only studies.[82] Any general explanation of work stress must be as relevant for women as it is for men. Occupational segregation along sex lines and the unequal division of household labour make it difficult to pinpoint sex-linked differences in stress. For this reason, researchers tend to use case studies of specific organizations or occupations to compare men and women with similar job content and working conditions. After controlling for working conditions in this way, men and women in some of the studies reviewed below report different levels and symptoms of stress. The explanations for such differences lie outside a person's place of employment, most likely in their family circumstances and gender roles.

A study by Karen Messing and J.P. Reveret underscores the importance of going beyond occupational categories or narrow job titles to explain apparent differences in how men and women experience stress.[83] This study examined working conditions and health problems among female and male workers in four Quebec fish processing plants. However, most jobs were sex-segregated, so that even men and women with the same job title actually performed different tasks. Women generally were assigned the worst jobs. That is, they were more likely than men to report that their jobs were uninteresting, that they couldn't move around, and that their work speed was fast. These stressful conditions resulted in higher levels of generalized fatigue; "feeling stressed"; tired hands, feet, backs, legs; insomnia, aches and pains, digestive problems, and headaches.

Messing and Reveret then investigated whether these health problems were related to sex differences in reporting or reflected actual working conditions. They compared males and females in two groups, "fast work speed" and "not fast work speed", in terms of levels of fatigue, feeling stressed, insomnia, aches and pains, and digestive problems. For all these difficulties, women with fast work speeds reported a higher incidence of symptoms than men who worked fast. However, this could be because the men and women had different referents, or because most women work a double day to meet their responsibilities in the home. Neither of these explanations was tested in the study, given its focus on stressors within the fish processing plants. But findings like this should prompt future research to incorporate family-related sources of stress.

It is possible, however, that some forms of employment may have such major negative health consequences that, for most workers, these would overshadow non-employment sources of stress — or at least make them more difficult to detect. We have already shown that machine-paced jobs are highly stressful. One of the few studies to investigate sex differences in reactions to machine-paced work surveyed 6,589 (47 per cent of them were female) letter-sorting-machine operators in the United States.[84] The study attempted to identify which specific features of machine-paced work have negative health effects. The researchers looked for relationships between, on the one hand,

overall job satisfaction, work-related self-esteem, age, sex, education, and five perceived job stressors (equity of pay, organizational satisfaction, task satisfaction, work pressure, cognitive demands) and, on the other hand, three types of strain: anxiety and depression, somatic complaints, and physician-diagnosed illnesses (gastritis, hypertension).

A worker's sex did not influence stress outcomes. For both male and female operators, the stressor-strain relationship followed the same pattern. Task dissatisfaction emerged as the key job stressor for both sexes. This contributed to work-related self-esteem and general job satisfaction, and these in turn influenced mental and physical health. Poor work-related self-esteem was the best predictor of anxiety and depression. Job dissatisfaction was the best predictor of gastritis and gastro-intestinal and musculoskeletal complaints.

Rachel Jenkins's study of "entrant executive officers" (183 men and 138 women) in the British civil service also tried to isolate possible sex differences in job stress.[85] The men and women in the classification Jenkins studied performed identical work. There was no evidence of sex bias in recruitment, length of tenure, or rate of promotion. The researcher selected younger workers (aged 20-35) to ensure that career histories were similar. Minor psychiatric problems (depression and anxiety) were assessed using the General Health Questionnaire (GHQ-30). Individuals exhibiting depression and anxiety were given a standardized psychiatric interview (CIS), as was a random sample of other study participants, to identify the onset, duration, severity, and frequency of common psychological symptoms. Interviewees were reassessed with the GHQ-30 after 12 months, and those who initially had psychiatric symptoms of stress also went through a second CIS. Interviews were conducted by the researcher, a female psychiatrist. To control for sex-related observer bias, verbatim transcripts were co-rated by a male psychiatrist.

Results showed no sex differences in psychological stress symptoms after 12 months, controlling for possible effects of age, education, occupation, and levels of social stress and support. Jenkins thus dismisses arguments that women's constitution or gender role socialization predisposes them to mental health problems. Again, job conditions — not sex — are central to the stress

process. We must not overlook the fact that the Jenkins sample was young, well-educated, middle class, and had a relatively high proportion of single individuals (46 per cent of the males, 37 per cent of the females). Even more salient is that only one woman in the study (compared to 25 of the men) had children. In light of the employees' social backgrounds, the findings take on a rather different meaning. Indeed, the relative absence of family and household responsibilities undoubtedly underlies the uniformity of male and female stress reactions on the job.[86]

Additional support for the pivotal role of job conditions in causing stress can be found in Graham Lowe and Herb Northcott's study comparing 992 men and women who performed identical mail-sorting and delivery jobs under similar working conditions in the Edmonton post office.[87] Two competing explanations of male-female stress differences were tested, one emphasizing gender-related social role demands, the other arguing that stress is mainly a reaction to employment conditions. Being female had a weak but statistically significant (i.e., did not result from chance) relationship to higher levels of depression, irritability, and psychosomatic symptoms. Nonetheless, gender differences were greatly overshadowed by the impact of specific job conditions.

For postal workers of both sexes, being subject to competing demands and having little variety and challenge in their jobs were strongly associated with stress outcomes. Because Lowe and Northcott considered a much wider range of specific job characteristics and working conditions as well as family situation than previous studies, they were able to identify some stressors that affected one sex more than the other. For example, shift work and low family income were more stressful for men than for women. Further, for females (but not males), increased work intensity worsened psychosomatic problems, and having friendly and helpful co-workers tended to reduce depression levels. Generally, however, women and men responded in similar ways to workplace stressors.

However, we cannot ignore the fact that women tended to report slightly higher levels of stress and responded differently to some stressors. Again, this invites speculation that family situations and obligations, which

were not fully examined in the study, compound the impact of stressful job conditions on women.

In a similar vein, impressive support for the organizational model of stress (as previously outlined) was recently presented by Robert Karasek and his colleagues.[88] They surveyed 5,000 male and 3,700 female unionized white-collar workers employed full-time in Sweden. The researchers examined the impact of job characteristics, social support, family situation, age, and sex on self-reported illnesses and symptoms, job satisfaction, social participation, and health-related behaviours such as smoking and pill consumption. Data on men and women were analysed separately. The key finding was that, after age, job factors (especially decisionmaking control, conflicts with management over how to do one's job, and work load) were the best predictors of health and health-related behaviour. They were more predictive than family situation for either males or females.

The study also documents how family situation affects the stressor-strain relationship. For example, the researchers expected the number of children at home to be a "stressor". Yet both men and women with children at home reported lower levels of some stress symptoms than individuals without children. Thus the presence of children in the families of these white-collar workers was a health-promoting influence. However, for women (but not men) having children at home was also associated with increased exhaustion and respiratory illness. Marital status also had a stronger impact on the health of women; single women, when compared to married women, were more likely to report psychosomatic illnesses and health-related behaviours such as smoking, absenteeism, and pill consumption. The association between having a working spouse and psychological strain was also stronger for women than for men. Family stressors (e.g., recent financial problems, serious illness in the family, divorce, births, other significant personal changes) contributed to a higher risk of physical illness for both men and women, while psychological strain and health-related behaviour were more prevalent among men.

The researchers attempted to quantify the relative impact of individual characteristics (age, marital status), job conditions, and family situation on health. For both men and women, half or more of the variation in their health was attributable to job conditions. Beyond this, age and marital status accounted for only 22 per cent of the variance in health measures among men and 26 per cent among women. Similar figures for the impact of family situation were 21 per cent for men and 24 per cent for women. Thus for these Swedish white-collar employees, their jobs had a far greater impact on their health status than their age, marital status, or family situation. The sex differences observed in the effects of family situation, according to the researchers, were consistent with women's greater home responsibilities.

Other researchers assign an even more powerful role to job conditions. Joanne Miller and her colleagues, for example, examined sex-related variations in the impacts of socialization and job conditions on psychological well-being.[89] They studied 269 American married women employed ten or more hours weekly, then compared these findings with similar studies of men. Closeness of supervision, task complexity, and routinization were the major determinants of psychological functioning among women. Job pressures and uncertainties were related to ineffective intellectual functioning and negative self-concepts. Comparing males and females, job conditions overshadowed the influence of life circumstances and personal preferences (occupational commitment, presence of young children in home, hours worked per week, preference for housework or paid work, spouse's income, sense of responsibility for contributing to family income). The Miller study takes a broader perspective on mental health and employment than most stress studies, showing that the link between psychological functioning and occupational conditions is just as strong for both sexes.[90]

The studies just described are broadly representative of recent mainstream job stress research. They also exhibit a standard weakness, namely a reliance on retrospective data. As mentioned earlier, retrospective studies ask an individual to report past health status, whereas longitudinal studies follow progress over a period so that changing work and family circumstances can be related to changes in the person's health. One of the few longitudinal

investigations of the connection between employment and physical disease is the Framingham Heart Study.[91] Researchers studied 350 female homemakers, 387 employed women, and 580 employed men for a nine-year period. All respondents were 45 to 64 years of age at the beginning of the study and free of coronary heart disease.

The Framingham Heart Study showed that employment status was the crucial predictor of health. On the whole, employed women did not have a significantly higher incidence of coronary heart disease (CHD) than full-time female homemakers. Indeed, female homemakers tended to have similar or higher rates of CHD compared to employed women. This corroborates other research (discussed below) suggesting that employed women have better health than female homemakers.[92] Among employed women in the Framingham study, clerical workers had the greatest risk of CHD — a disturbing finding given the vast numbers of women working in this occupation. Furthermore, the researchers point out that female clerks with three or more children and married to a blue-collar worker were especially at risk of CHD. In short, the authors suggest that heavy family responsibilities, and little help at home from husbands who see housework as a woman's responsibility, compound the stresses of clerical work.

This discussion of differences in job stress between the sexes makes several important contributions to our understanding of women's work stress. First, even though few of these studies were designed to analyse the impact of family and household, they nonetheless reveal that these factors have a major influence on the well-being of both women and men. Second, the effects of job conditions on employed men and women have a greater impact on their well-being than do family or household characteristics. Third, stressful job conditions may interact with domestic pressures in different ways for each sex, and more acutely for women than men.

Viewed more broadly, the evidence challenges the common assumption made by employers that family problems, not job problems, are the root cause of employee stress.[93] Considering that overall patterns of stressor-strain relationships are similar for employed men and women, one could also question,

as Nicola Cherry has, "whether it is scientifically, or indeed politically, helpful to consider (non-pregnant) women as particularly susceptible or unresilient workers with special weaknesses, or special needs."[94]

Finally, the Framingham study demonstrates the importance of paying careful attention to the qualitative aspects of women's job and family roles and circumstances. The amount of time spent being a mother or an employee is probably less important than the quality of these role experiences. Essentially this means striking a balance between the positive and negative aspects of each. The daily "hassles and uplifts" of women's combined work activities will directly influence their stress levels.[95]

Are Women Exposed to Unique Stressors?

However convincing these arguments, we should also recognize that certain employment conditions affect women more than men. Basic inequities in employment opportunities and rewards are distinct stressors for women. Women's double days of paid employment, childrearing, and household work — with all the resulting compromises, dilemmas, and conflicts — set up stressful scenarios that few men confront.

Single mothers, for example, may face a combination of stressful circumstances. For those previously married, the death of a spouse, divorce, or separation are highly stressful life events posing risks to their health.[96] Financial, legal, housing, and child-care problems may also arise. Moreover, women who had been full-time homemakers could face difficulties finding and, as they lack seniority, keeping a job. For them, the transition back into the work force can itself be a stressful process, made worse in the case of single parents by the urgent need to be self-supporting.[97]

Sexual harassment is another form of stress women face in the work-place. A survey of 2,004 women and men conducted by the Canadian Human Rights Commission found that 15 per cent of the women (compared to 4 per cent of the men) had received unwanted sexual attention they considered to

be harassment. About 36 per cent of these incidents occurred in the workplace. These victims of harassment often experienced emotional distress, in addition to fears of losing their jobs or other reprisals.[98] An analysis of sexual harassment cases reported by women seeking help from the Working Women's Institute in New York City provides a more detailed account of the resulting mental and physical stress. In about 90 per cent of the 262 cases, the women experienced general tension, nervousness, anger, and fear. One in five of the victims reported physical symptoms such as nausea, headaches, and tiredness. And about 12 per cent had sought the help of a physician or psychotherapist. There was also a general loss of job satisfaction and self-confidence.[99]

Despite the fact that workplace sexual harassment is illegal in Canada, few victims make formal complaints. The lack of satisfactory remedies merely aggravates its stressful effects. These problems are graphically illustrated in the case of Bonita Clark.[100] After suffering eight years of physical and psychological harassment and discrimination as a skilled blue-collar worker at Stelco's male-dominated steel plant in Hamilton, Clark filed complaints with Ontario's Human Rights Commission and Labour Relations Board. Recently the Human Rights Commission ordered Stelco to compensate Clark and to install a washroom for women employees. The case before the Labour Relations Board sought to establish that sexual harassment, and the resulting stress, is a health and safety risk. While a settlement was reached with Stelco before the Board ruled on the case, the publicity attracted by Bonita Clark's campaign has heightened public awareness and may lead government, management, and unions to prevent such abuses of the rights of female workers in future.

Part-time employment also deserves attention as potentially stressful. Women make up more than 70 per cent of all part-time workers in Canada. In fact, more than one-quarter of all employed women hold part-time (less than 30 hours weekly) jobs, the largest group being in the 25 to 44 age category.[101] These are prime childbearing years. For many of these women, a part-time job is the best — although not necessarily ideal — means of balancing the demands of raising young children, their family's need for an adequate income and/or the desire to pursue a career. Yet about 29 per cent of part-time female workers aged 25 to 54 would prefer full-time jobs.[102] Moreover,

about two-thirds of part-time workers are in service, sales, or clerical work. Ghettoized at the bottom of these occupations, many part-time workers have few benefits, slim hope of training or promotion, tenuous job security, and no access to the potential advantages of union representation.[103] In short, part-timers are often treated as second-class employees.

Another form of work on the rise in Canada is industrial homework. Many immigrant mothers of young children toil at home sewing clothing, toys, and other articles for piece-rate pay, often below the minimum wage. Laura and Robert Johnson's interviews with industrial homeworkers graphically document that stress is the major health problem faced by these women.[104] They experienced intense competing pressures to care for children and keep house while meeting work quotas and deadlines. These women were forced into an unhappy compromise between their desire to look after their children at home and the necessity to contribute to family income.[105] Irregular work flow and hours made it difficult to plan their own time. Added to this were the health hazards of lint, fabric dust, and fluff; noisy machines; and the physical strain of sitting long hours at a sewing machine.

The workers interviewed in the study claimed that the biggest disadvantage was never being able to relax because they felt that their work was never done. An older, experienced worker described how her young cousin with two pre-school children had to quit because of the stress: "She would try to do everything. She would jump up from the machine, feed the baby, quick sew in a zipper, stir the pot on the stove, rush back to her machine, rush back to change the baby and keep on sewing. She would eat her own sandwich while she kept sewing. The doctor told her she would get an ulcer if she kept it up."[106]

Industrial homework is a form of exploitation to which immigrant women, among others, are vulnerable as they often lack language training, viable child care, and employment alternatives. The Johnson research shows the importance of taking socio-economic status, education, job training, language proficiency, and ethnicity into account when explaining how different groups of women experience stress.

Changing economic conditions may also affect women and men differently. The recession of the early 1980s intensified women's domestic tasks, especially in working-class families where the impact of unemployment was greatest.[107] To stretch family budgets further, wives spent more time bargain-hunting, preparing food, cleaning and repairing clothes, and looking after children. Increased family stresses because of husbands' unemployment increased women's "tension management work".[108] For example, Paul Grayson's study of the 1981 shutdown of the SKF bearing factory in Scarborough, Ontario, found that the stresses of job loss took a toll on the health of both the unemployed husband and his wife.[109]

Women who lose their jobs also endure economic and psychological hardships that may, in some cases, be greater than for men.[110] The tendency in the social science literature has been to "masculinize" unemployment, reinforcing the image of women as supplementary wage earners.[111] There is, however, growing recognition of variations between the sexes in the consequences of unemployment.[112] For instance, research has documented that, for males, long-term unemployment results mainly in increased drinking and respiratory and stomach problems. In contrast, unemployed women are likely to suffer from depression, eating disorders and weight changes, and loss of self-esteem.[113]

Women also seem to define unemployment differently than men do because of how it affects the complex integration of family and employment activities. As Paula Rayman observes, unemployment is a life crisis that may raise the following questions for unemployed women: "What have her choices or circumstances really meant? Has she given up time with children to meet job demands? Does the confidence derived from the workplace enhance her self-esteem at home? Has she subordinated job possibilities in order to fulfill her mothering commitment?".[114]

Leaner economic times in the public sector mean funding cutbacks in human services, thereby adding to the workload of many women who use these services. In addition, women make up the majority of employees in health care, social services, and education where job burnout is common.[115] What makes these jobs inherently stressful is responsibility for the welfare of

about two-thirds of part-time workers are in service, sales, or clerical work. Ghettoized at the bottom of these occupations, many part-time workers have few benefits, slim hope of training or promotion, tenuous job security, and no access to the potential advantages of union representation.[103] In short, part-timers are often treated as second-class employees.

Another form of work on the rise in Canada is industrial homework. Many immigrant mothers of young children toil at home sewing clothing, toys, and other articles for piece-rate pay, often below the minimum wage. Laura and Robert Johnson's interviews with industrial homeworkers graphically document that stress is the major health problem faced by these women.[104] They experienced intense competing pressures to care for children and keep house while meeting work quotas and deadlines. These women were forced into an unhappy compromise between their desire to look after their children at home and the necessity to contribute to family income.[105] Irregular work flow and hours made it difficult to plan their own time. Added to this were the health hazards of lint, fabric dust, and fluff; noisy machines; and the physical strain of sitting long hours at a sewing machine.

The workers interviewed in the study claimed that the biggest disadvantage was never being able to relax because they felt that their work was never done. An older, experienced worker described how her young cousin with two pre-school children had to quit because of the stress: "She would try to do everything. She would jump up from the machine, feed the baby, quick sew in a zipper, stir the pot on the stove, rush back to her machine, rush back to change the baby and keep on sewing. She would eat her own sandwich while she kept sewing. The doctor told her she would get an ulcer if she kept it up."[106]

Industrial homework is a form of exploitation to which immigrant women, among others, are vulnerable as they often lack language training, viable child care, and employment alternatives. The Johnson research shows the importance of taking socio-economic status, education, job training, language proficiency, and ethnicity into account when explaining how different groups of women experience stress.

Changing economic conditions may also affect women and men differently. The recession of the early 1980s intensified women's domestic tasks, especially in working-class families where the impact of unemployment was greatest.[107] To stretch family budgets further, wives spent more time bargain-hunting, preparing food, cleaning and repairing clothes, and looking after children. Increased family stresses because of husbands' unemployment increased women's "tension management work".[108] For example, Paul Grayson's study of the 1981 shutdown of the SKF bearing factory in Scarborough, Ontario, found that the stresses of job loss took a toll on the health of both the unemployed husband and his wife.[109]

Women who lose their jobs also endure economic and psychological hardships that may, in some cases, be greater than for men.[110] The tendency in the social science literature has been to "masculinize" unemployment, reinforcing the image of women as supplementary wage earners.[111] There is, however, growing recognition of variations between the sexes in the consequences of unemployment.[112] For instance, research has documented that, for males, long-term unemployment results mainly in increased drinking and respiratory and stomach problems. In contrast, unemployed women are likely to suffer from depression, eating disorders and weight changes, and loss of self-esteem.[113]

Women also seem to define unemployment differently than men do because of how it affects the complex integration of family and employment activities. As Paula Rayman observes, unemployment is a life crisis that may raise the following questions for unemployed women: "What have her choices or circumstances really meant? Has she given up time with children to meet job demands? Does the confidence derived from the workplace enhance her self-esteem at home? Has she subordinated job possibilities in order to fulfill her mothering commitment?".[114]

Leaner economic times in the public sector mean funding cutbacks in human services, thereby adding to the workload of many women who use these services. In addition, women make up the majority of employees in health care, social services, and education where job burnout is common.[115] What makes these jobs inherently stressful is responsibility for the welfare of

patients, clients, or students, with limited resources to deal adequately with their needs. The survey by the National Association of Working Women (mentioned earlier) found health care (including social work) to be the most stressful industry for women, controlling for the effects of number of hours worked.[116] Increased workloads and a deterioration of working conditions often follow budget cuts, although stress researchers have not yet investigated this problem. The related trend towards privatizing of health care, coupled with the increasing emphasis on home care, is shifting the burden of caring for the sick and the elderly onto families. Nursing functions that previously would have been part of paid jobs in a health-care institution are now being performed by wives and mothers in the home.[117]

Even less is known about the relationship between work stressors and reproduction. Many of the stress reactions already discussed could indirectly affect the reproductive functioning of both women and men. As Nancy Miller Chenier explains,

> . . . professionals in the field of occupational health, social work or mental health rarely consider the effects of work stress in treating conditions such as alcoholism, impotency, or marital breakdown, which may be its symptoms. The impact of psychosocial factors on the worker's ability to function, including reproductive activities, needs fuller appraisal by all members of the health community. Impotency in male workers as a result of job anxiety, increased use of alcohol and tranquilizers by male and female workers dissatisfied with their jobs, stress-related debilitating diseases such as coronary heart disease related to lack of job control, the effects of women's double work day — all may have direct or indirect consequences for the production of healthy offspring.[118]

There is no question that women in traditionally male occupations face a host of stressors that men are unlikely to experience. This is as true in blue-collar occupations as it is in male-dominated professional/managerial occupations. However, research into the stresses women face in non-traditional jobs has neglected the former and concentrated on managerial and professional women.

Generally, however, women in non-traditional jobs face a particular kind of role conflict. They may be criticized for trying to act like men, yet "feminine" behaviours are often thought to be inconsistent with job expectations. The fewer women in an occupation or organization, the greater the pressure to adopt "male" styles of behaviour. At the same time, this message may be counteracted by male colleagues ascribing sex stereotypes and engaging in discriminatory behaviour, such as asking a female manager or professional to serve coffee at a meeting. Moreover, women in male-dominated jobs are likely to work in isolation, lacking supportive relationships with superiors and co-workers — in short, facing all the pressures of being an outsider.[119] Whether on a construction site or in the executive suite, the lack of female role models and mentors makes it even more difficult for women to thrive in a male domain.

Rosabeth Moss Kanter's study of women in the male corporate world clearly portrays the pressures experienced by women managers.[120] Kanter argues that an individual's organizational position, and the resulting balance of constraints and opportunities, is the key to explaining attitudes and behaviour. While Kanter does not examine stress specifically, her analysis identifies potential stressors, such as women managers' token or minority status, success based on masculine criteria, lack of role models, and social isolation from the dominant male group.

Cary Cooper and Marilyn Davidson, for example, found that many work pressures reported by female managers were beyond their control. These pressures arose out of "prejudice and discrimination from both organizational/corporate policy and other people at work."[121] Career development and pay may suffer as a result, creating additional stress. The women in this study also reported difficulties in social relations with male co-workers, ranging from being perceived as a threat to outright sexual harassment. A related problem concerns sex biases in performance evaluations. Male job performance is evaluated more highly and attributed to strong abilities, while women's career success is more likely to be seen as a result of luck or effort.[122] Thus female performance in a traditionally male job may bring lower rewards than equal performance by a man in the same position. Married women, in particular, face

dilemmas as they juggle the pressures of a career in a male-oriented environment with their domestic lives.[123]

From the examples cited so far, it is clear that urban women in white-collar jobs continue to be the focus of stress research. Specific high-risk groups, such as ethnic or Aboriginal women, elderly women, single parents, or farm wives, have largely been ignored. Rural farm women are especially interesting from our perspective because their lives involve close connections between work and family. One of the few studies of stress among farm women describes how their active involvement in all aspects of farming is combined with traditional female homemaker tasks. While the combined load of home and farm responsibilities was not itself stressful, the amount and kind of informal help, or lack thereof, received from the husband was related to psychological stress.[124] The study of farm wives should yield considerable knowledge about the health benefits of equitable and mutually supportive family role arrangements.

Gender Roles and Ill Health

There is solid evidence that women report more physical health problems, attest to higher levels of psychological distress, and use health-care services more frequently than men do.[125] Paradoxically, women in western industrial societies also live longer than men and have lower mortality rates for most causes of death.[126] In short, the research to date suggests that while men have higher rates of serious and incapacitating illnesses, women are more prone to report minor psychological and physical problems.[127]

What lies behind these apparent sex differences in health and illness? Some answers can be found in epidemiological studies of the relative impact on women's health of work in the home and of outside employment. The key point emerging from this research is that gender-based division of labour — a recurrent theme in this paper — seems to be responsible for many of the observed sex differences in health and illness.

At issue is whether reported sex differences in health problems reflect real differences between men and women. If women report higher levels of stress than men do, then perhaps this reflects actual differences in illness between the sexes. However, because males in our culture are expected not to admit physical weaknesses and females are brought up to express their feelings more openly, it is possible that sex differences in illness are a product of gender role socialization. In other words, socialization may encourage men and women to report and respond to illness in different ways. Nonetheless, it is equally plausible that sex differences in ill health are real, not a product of a greater tendency to report illness symptoms.

Much of the debate over sex differences in health revolves around whether female roles are more stressful, resulting in higher rates of mental health problems.[128] The influential work of Walter Gove and his colleagues attributes sex differences in mental illness (depression, anxiety, mental disorganization) to the less rewarding, more frustrating roles women occupy in society.[129] Despite critiques of Gove's explanation, there seem to be consistent sex differences in specific symptoms.[130] Women have higher rates of neurosis — especially depression, a common sign of stress — and manic-depressive psychosis. Men have higher incidences of personality disorders.

For wives, marriage itself may be a major source of stress. Paul Cleary and David Mechanic's study of married people examined whether marriage is "inherently disadvantageous" for women, or whether specific types of marital roles and demands are more stressful than others.[131] Overall, the researchers detected only small differences between the role pressures of men and women. Marital satisfaction was more important than work for employed women, while job satisfaction was more central for men. Being employed and a parent contributed to depression for women, but not for men. Interestingly, when employed women are compared with full-time female homemakers, being a parent (and the number of children in the household) had a salutary effect on the mental health of the former but not the latter. The reverse was true for female homemakers: not working outside the home and having no children had a negative impact on their health. Thus the health benefits of employment may depend on other factors, like having children in the home. The researchers conclude

that the impact of women's employment on psychological well-being is inconclusive.[132]

However, Susan Gore and T.W. Mangione refute the argument that gender socialization makes marriage and family demands particularly stressful for women.[133] Their "social role" perspective claims that the benefits and costs of employment, marriage, and other roles should be identical for both sexes. In other words, sex differences in mental health result from different roles occupied by men and women, not from gender socialization. Thus the mental health of men and women should converge as their roles become more similar. Gore and Mangione's data show that both employment and marriage have a positive impact on the mental health of both sexes, even after other risk factors such as low income, advanced age, and poor physical health are taken into account.

As mentioned earlier, another explanation of sex differences in stress claims that socialization encourages women to recognize and seek help for symptoms of illness. Hence, the higher incidence of mental disorders reported by women is more illusory than real.[134] Women's traditional roles of mother and wife emphasize nurturing. On one hand, as caregivers women are often required to nurture others, perhaps neglecting themselves.[135] In addition, these women may receive little or no nurturing themselves. On the other hand, household and family roles for women not in the labour force are also more flexible than employment roles, allowing greater opportunity to respond to symptoms of sickness. In contrast, this position suggests that men's employment responsibilities, reinforced by expectations of masculine behaviour, are restrictive in terms of recognizing and dealing with sickness. Hence women may report more psychological problems and seek help more frequently than men with comparable problems.[136] Medical doctors may also diagnose minor psychiatric symptoms differently for male and female patients. On balance, the evidence that gender socialization contributes to variations in how women and men evaluate and react to stress is inconclusive.[137]

While far from unequivocal, the research just described suggests that the quantity, quality, and cumulative demands of the roles people occupy directly affect their health. This appears to be true of both men and women. Gender socialization or biological characteristics are inadequate explanations of male-female differences in the incidence of mental and physical health problems.[138] On average, employment has a positive effect on an individual's well-being, regardless of sex, when compared to the effect of working solely within the household. As Grace Baruch and her colleagues put it: "Despite the current media fascination with women who flee the workplace, subtracting the role of paid worker is unlikely to reduce a woman's stress level overall, except perhaps on a short-term basis for the mothers of very young children."[139]

To the extent that employed men and women have different patterns of job-related stress, this can be attributed partly to a sex-segregated occupational structure that ghettoizes women, more so than men, in low-level jobs with inherently stressful conditions. Even though employed women have generally better health than full-time female homemakers, they still continue to perform the majority of domestic tasks. The stresses of employment and household work must not be viewed in isolation from one another. A more comprehensive view of the work stresses faced by most women today can be gained by examining the interaction of housework, childrearing, marriage, and employment in the labour force.

The Stresses of Women's Household and Family Work

Research has shown that female homemakers have worse health than employed wives and that job stress among employed women is compounded by household demands. Yet the specific stressors of the homemaker, mother, and wife roles are only now beginning to receive the close scrutiny they deserve. An emerging body of research is examining how various combinations of employment and family roles affect women's general well-being.[140]

Specific family situations — young children, a large family, single parenting, a heavy domestic workload, limited financial and other resources — are high-stress scenarios. But it is important to probe the nature of these roles. Grace Baruch and her colleagues argue that, particularly in the case of women, "the quality of work life is linked to the quality of both marital and parent-child relationships."[141] Long hours of household work can cause fatigue, depression, and other illness. Indeed, lack of personal time is perceived as a major stressor by many women.[142] However, evidence suggests that the quality of these roles — the balance of advantages and disadvantages — is a good predictor of stress.[143] Hence the amount of time devoted to various roles may be less important than their content. For example, mothers' total child-care hours would decline if fathers helped more. But if fathers take over pleasurable times with children, such as bathing or story-telling, this still leaves mothers to attend to the more demanding physical and emotional needs.[144]

While these are important observations, it is also useful to examine household work as one would any occupation. Such an examination reveals striking parallels between workplace and household stressors. Ann Oakley's classic study of female homemakers in London, England, describes the occupational dimensions of housework.[145] The 40 women interviewed by Oakley, all mothers aged 20 to 30, defined housework as labour. In comparison with their husbands' jobs, they thought their work was harder, partly because they viewed their housework as never-ending.

Autonomy was considered the best aspect of housework, but this is an elusive quality because of the consequences of not doing the daily housework. Monotony and boredom were considered the worst things about housework; social isolation intensified job dissatisfaction. The most disliked activities were ironing, washing dishes, and cleaning. Comparing these perceptions of housework with data from a study of male automobile assembly-line workers, Oakley documents that the job of homemaker is more monotonous, and fragmented, faster paced, and involves much longer hours.[146]

Subsequent studies have built on Oakley's feminist analysis, illuminating specific sources of housework-related stress. Two concepts from occupational stress research — role overload and role conflict — are useful for examining how the roles of wife, mother, and homemaker often are incompatible. From this perspective, mothering can be particularly stressful.[147] Learning to care for one's first baby is like learning a new job. In addition to having little power to define and control the work of childrearing, isolation from other adults and a lack of feedback on their "job performance" can make motherwork especially stressful.[148]

Job security is another potential problem, especially among displaced homemakers, e.g., stay-at-home women over age 45 who are forced into employment after a marital breakdown but encounter barriers because of their age and/or their lack of skills or education.

Another component of women's household work is providing home-based health care for husbands or partners, children, relatives, and parents, both inside and outside their own home. Anita Heller's survey of 165 women across Canada documented some of the stresses of this "health guardian role". Time pressure was a big problem: while 62 per cent of full-time homemakers felt they had enough time for health care, only 50 per cent of part-time and 35 per cent of full-time employees did, with resulting increases in fatigue.[149] More generally, looking after the physical and psychological well-being of family members shows how central caring relationships are in women's lives. Caring can be rewarding, but it also has its costs in the form of guilt, conflict, added burdens and pressures.[150] This may help to explain why women are more vulnerable than men to the effects of family stress.[151]

These stressors result in job dissatisfaction among female homemakers and, moreover, contribute to their health problems. Yet these occupational risks are obscured by the myth that housework is not really work. Indeed, having to cope with the low status accorded to housework in society constitutes yet another source of stress. As Helen Levine notes, the low status of housework in our society is reflected in female homemakers' self-effacing comments such as "I don't work; I'm just a housewife."[152]

Carmi Schooler and her colleagues provide strong empirical evidence of the similarities between working conditions in household work and paid employment.[153] The major contribution of this study is its measurement of how, and under what conditions, housework is performed. Schooler and her research team apply a model they used previously to study paid employment.[154] This model proposes that self-directed paid or unpaid work leads to effective intellectual functioning and a self-directed orientation to self and society. As we might expect, jobs at the other end of the continuum — those with oppressive working conditions — lead to psychological distress.

The researchers examined the housework performed by a sample of 555 married couples in the United States using measures appropriate for all occupations. Self-direction in housework was defined as the use of initiative, thought, and independent judgement. Each respondent's work with things, people, and data was recorded, as was the amount of time spent on various tasks and the degree of task routinization. Then parallel dimensions of respondents' paid jobs were compared with the housework performed by both wife and husband. For women, their housework involved more complex work with things than their jobs did. However, housework was dirty, heavier, more routinized, and less complex than paid employment when it came to dealing with people. Similar differences were found when women's housework was compared with their husbands' paid jobs, although men's employment was characterized by more complex work with data, more time pressure, and greater responsibilities for outcomes beyond their control.

These findings indicate that in many ways housework, as labour, is not a unique work experience. According to Schooler and her colleagues, what distinguished housework performed by both sexes from paid work was mainly that housework involved less task complexity. As for paid work, the content and conditions of women's housework predicted their psychological functioning. For both full-time female homemakers and employed wives, the effects were similar: doing substantively complex housework resulted in healthier psychological functioning, whereas doing heavy housework resulted in psychological distress. Men's housework had less impact on their psychological well-being, reflecting the different meanings of housework for men and women. For wives

only, housework was governed by the same necessity and responsibility as paid employment.

Turning to a different point, socio-economic differences must be considered when interpreting the potential stresses of women's household labour. Meg Luxton's study of working-class households in Flin Flon, a northern Manitoba mining town, captures the anger and frustration some blue-collar wives feel, especially given their very full double day: "I come home from work dead tired and I still have to cook and be with the kids and clean up. And he just lies around, drinking beer, watching TV and I get so mad, I could kill him."[155] At the other end of the socio-economic scale are "corporate wives", female homemakers who work behind the scenes as unpaid employees of the corporation to help their husband's career.[156] Such women are often corporate casualties, suffering from the stresses of frequent corporate transfers and their husband's travel absences. Evidence suggests, for instance, that the impact of husbands' job transfers on wives may be chronic depression, lack of hope, and addiction to alcohol, tranquilizers, and barbiturates.[157] Middle-class wives, obviously, are also vulnerable to the stresses of household responsibility cited above.

Moderators in the Stressor-Strain Relationship

A variety of personal, organizational, or social factors can influence a worker's response to stressful job conditions, yet few studies take these stress moderators into account.[158] Even fewer have considered gender roles and identities as mediators between workplace stressors and ill-health outcomes.[159] The division of labour exposes men and women to different stressors and produces different symptoms of ill health.

While little attention has been given to how one's sex may moderate the stressor-strain relationship (either by cushioning its impact or making it worse), some of the research on social support, vulnerability, and coping has raised relevant issues in this regard.[160] We must recognize, however, that interest in stress moderators arose from the psychological model's emphasis on

individual perceptions and reactions to stressors. Hence discussions of social support, vulnerability, and coping share the limitations of the psychological model. In particular, there is a tendency to emphasize individual factors in the stress process while downplaying job content and working conditions.

Discussions of stress moderators usually assume that stress results from a discrepancy between perceived work demands and a worker's ability to cope. Stress is a problem situation, coping is a means of solving the problem, and supportive social relationships can "buffer" the impact of the problem. Thus a stressful situation is one where the job demands placed on an individual exceed his or her resources and, moreover, opportunities for coping as well as receiving social support are limited.

The literature on social support has, to some extent, examined sex and gender as variables in stress-moderating processes.[161] Social support suggests that a person's social relationships with spouses, friends, co-workers, and supervisors affect their level of stress and, consequently, their well-being. Ideally these individuals can be relied upon to offer emotional, instrumental, and other types of support which helps reduce the level of stress or buffers its negative impact on health. An important insight emerging from studies of social support is that workers' non-work social relationships influence their responses to workplace stressors (and vice versa).

Social support undoubtedly makes a crucial difference in health outcomes for women in some work situations. For example, the Framingham Heart Study found female clerks to be at greater risk of developing coronory heart disease than female homemakers and other female workers, especially if they had a non-supportive boss or were married to someone who would be less likely to help out around the house.[162]

Are there significant differences between the sexes in terms of social support that could make women more vulnerable to work stress? Stress researchers have tried to determine what personal characteristics underlie individual differences in the need for, and availability of, social support.[163] A study of Edmonton postal workers found that both males and females who

perceived job pressures to be a problem typically reported having non-supportive supervisors. Furthermore, social support from spouses, friends, or relatives had no influence on respondents' stress-related health problems once the effects of working conditions and personal characteristics such as age, education, marital status, and number of children had been neutralized.[164] There is additional evidence that male and female employees have similar levels of work-based social support. This challenges the common view that women rely less on workplace support and more on family and non-work sources of support than men do.[165]

Caring relationships outside the workplace are nonetheless important in women's lives. The overall quality of social relationships in the family can be a source of either pressure or support. For example, poor communication with a spouse (i.e., an emotionally non-supportive relationship) contributes to depression among women.[166] In contrast, the division of family tasks (i.e., instrumental social support) improves mental health only among women whose husbands assume a more equitable share of family responsibilities, especially child care.[167]

Are women consequently more vulnerable than men to family stresses? For many women, family roles and responsibilities form an important part of their sense of identity and self-esteem, and wives often shield their husbands from the pressures of family life. For these reasons, one would expect differences between men and women not only in exposure to stressors, but also in coping strategies, social support, and reactions to stress. We know little, however, about how the moderating effects of employment on family stress differ for men and women, although one might expect these effects to be less important to the health status of men.

Turning to the issue of coping, evidence suggests that men report problem-solving responses to work pressures more often than women do.[168] One likely explanation for this coping response by males can be found in their greater access to workplace resources (especially decision-making authority) that aid in problem-solving. But overall, it appears that lack of adequate coping strategies or access to social support do not explain why women are more

vulnerable than men to the effects of stressful events, either in the home or at the workplace.[169]

The National Association of Working Women survey on women and stress discovered a stronger relationship between negative coping and poor health than between positive coping and good health. For example, the survey showed that alarmingly high stress levels among customer service representatives stemmed partly from job constraints that gave these workers no alternative but to apologize for things (e.g., company policy) that were not their fault — in short, negative coping. In contrast, only two positive coping styles were significantly related to the absence of medical conditions: regular exercise and frequently "blowing off steam/getting it off your chest".[170]

In sum, although social support and various coping mechanisms do help to cushion the impact of work stressors, their influence is a moderating one only. Even though the concepts of coping and social support do not get at the roots of the stress problem, they have been used to devise strategies to help women deal with stress. For example, female professionals are encouraged to develop supportive relationships with mentors and increase their coping abilities through greater self-confidence and self-awareness.[171] Others have proposed the restructuring of household work, delegating household tasks to others, setting clear limits on family responsibilities, and constructing a lifestyle that combines the best aspects of home and job.[172] Harriet Rosenberg goes much further, calling for the reorganization of childrearing within the family and the community, involving a much larger supportive network of women and men.[173] Indeed, a national child-care policy based on universal accessibility to high-quality care is a logical extension of the social support concept.

Solving the Problem of Work Stress

In summary, the work stress literature has been limited by a tendency to draw general conclusions about the nature of stress mainly from research findings about male employees. Concepts (even that of job stress itself) and empirical measures have also suffered from a male bias. However, promising

new research directions are on the horizon. The variable of sex is being incorporated in research on the stress process. A woman-centred approach is emerging that takes as its starting point the complex interplay of all forms of women's work, both in the household and in the labour force.

The mountains of data collected on work stress inform various programs aimed at reducing stress. Research from a psychological perspective advocates intervention strategies to teach individuals how to cope better with stress. Organizational models of stress, in contrast, call for job redesign and organizational change as the route to a stress-free work environment. Essentially, then, there are two strategies for dealing with work stress: change the person to make her or him more resilient, or change the specific job conditions that produce stress-related health problems.

Stress management techniques are now popular. However, evaluations of programs such as behavioural modification, relaxation training, and biofeedback suggest that they have few if any lasting benefits.[174] The only effective way of reducing job stress is by tackling the root causes of the problem residing in the nature of the work itself.

We know enough about which working conditions are health-damaging to map out the necessary organizational changes. In doing so, it is essential to locate stress within a more holistic and humanistic occupational health perspective. This means getting away from the rather negative focus on illness found in most work stress literature. Priority must to be given to "wellness" — not just the absence of illness. In the meantime, research evidence can be used by unions and workers' advocacy groups to obtain compensation from Workers' Compensation Boards for victims of workplace stress. So far, progress in this direction has been slow.[175]

A holistic occupational health perspective therefore advocates positive goals:

- enhancing an individual's work experiences;
- creating work environments that promote well-being; and
- eliminating inequalities in employment opportunities, conditions, and rewards that contribute to a high incidence of stress problems among specific groups of women and men.

It further assumes that people should be actively involved in creating work environments more suitable to their needs. In short, three principles — employee participation in decision-making, mental and physical well-being as the main occupational health goal, and active employee involvement in changing the workplace — can help employees reform their workplaces in ways beneficial to their overall health.[176]

How could this holistic approach to occupational health be translated into practice? Scandinavian experiences are instructive in this regard.[177] Legislation in Norway and Sweden, for example, empowers employees to create changes suited to their own needs and the characteristics of their workplaces. Public policy articulates the principle that groups of employees have the right to devise their own ways, in consultation with unions and management, of ameliorating stressful and generally dissatisfying work.

Recent innovations in health and safety legislation in Canada now involve employees directly in occupational health monitoring, inspection, and education within the workplace.[178] This is a step, albeit small, in the right direction. Yet work-induced stress has not been addressed effectively by worksite health and safety committees in this country.

Workplace strategies offer only partial relief to women, who also face stressful conditions in the home. Minimizing stress must begin with the recognition that, for women, stress is largely derived from an unequal division of labour between men and women in society. A major impediment to initiating necessary changes is the victim-blaming mentality that often makes women feel responsible for the pressures, conflicts, and tensions in their workplaces and in their homes. Worksite health promotion programs can help counteract the view that individual inadequacies are the source of stress problems.[179] Such

programs must address stresses generated by workplace and household arrangements which affect women.

The politics of women's work stress are clear. Creating health-enhancing workplaces through job restructuring, ergonomically designed equipment, and industrial democracy are minimum requirements as far as women are concerned. Broader social policies are needed to redress the imbalance of work roles and responsibilities in the household. Barriers to women's full and equal participation in the labour force must be dismantled. Employment and pay equity initiatives must be pursued vigourously. Universally accessible child care, parental leave programs, and effective policies to eliminate sexual harassment must be adopted. These public policy objectives are essential if we are to eliminate the stressful conditions experienced by women, regardless of where they work.

NOTES

1. *The Globe and Mail*, 3 March 1984.

2. G.L. Baruch, L. Biener, and R.C. Barnett, "Women and Gender in Research on Work and Family Stress", *American Psychologist*, vol. 42, no. 2 (February 1987), p. 130.

3. M. Cohen and M. White, *Playing With Our Health: Hazards in the Automated Office* (Vancouver: Press Gang Printers, 1986), p. 1.

4. For a discussion of a "gendered understanding" of social reality, see J. Stacey and B. Thorne, "The Missing Feminist Revolution in Sociology", *Social Problems*, vol. 32 (1985), p. 307. For a refutation of the myth that male-female differences in job performance result from biology, see K. Messing, "Do Men and Women Have Different Jobs Because of Their Biological Differences?" in *Women and Men: Interdisciplinary Readings on Gender*, ed. G.H. Nemiroff [Toronto]: Fitzhenry & Whiteside, 1987), pp. 341-353.

5. R.L. Feldberg and E.N. Glenn, "Male and Female: Job Versus Gender Models in the Sociology of Work", *Social Problems*, vol. 26 (1979), pp. 524-538.

6. On this point, see V. Beechey, *Unequal Work* (London: Verso, 1987); M. Eichler, *Nonsexist Research Methods: A Practical Guide* (Boston: Allen & Unwin, 1988).

7. For critiques of male biases in the sociology of work and organizations, see Feldberg and Glenn, "Male and Female"; J. Hearn and P.W. Parkin, "Gender in Organizations: A Selective Review and a Critique of a Neglected Area", *Organization Studies*, vol. 4, no. 4 (1983), pp. 219-242. On the neglect of women in work stress research, see J.R. Terborg, "Working Women and Stress", in *Human Stress and Cognition in Organizations*, ed. T.A. Beehr and R.S. Bhagat (New York: John Wiley & Sons, 1985), pp. 245-286; T. Cox, "Editorial: Women and Work", *Work and Stress*, vol. 1, no. 3 (July-September 1987), pp. 203-206; S.A. McDaniel, "Women, Work and Health: Some Challenges to Health Promotion", *Canadian Journal of Public Health/Revue canadienne d'hygiène publique*, vol. 78, no. 5 (September/October 1987), pp. S9-S13; T.D. Jick and L.F. Mitz, "Sex Differences in Work Stress", *Academy of Management Review*, vol. 10 (1985), pp. 409; R.J. Burke, "The Present and Future Status of Stress Research", *Journal of Organizational Behavior Management*, vol. 8 (1987), p. 255; M.A. Haw, "Women, Work and Stress: A Review and Agenda for the Future", *Journal of Health and Social Behavior*, vol. 23 (1982), pp. 132-144; Baruch et al., "Women and Gender in Research on Work and Family Stress".

8. Baruch et al., "Women and Gender in Research on Work and Family Stress", p. 130.

9. Haw, "Women, Work and Stress", pp. 132-144.

10. R.J. Burke and P. Bradshaw, "Occupational and Life Stress and the Family", *Small Group Behavior*, vol. 12 (1981), p. 329.

11. Baruch et al., "Women and Gender in Research on Work and Family Stress", p. 134.

12. Canadian Advisory Council on the Status of Women, *Integration and Participation: Women's Work in the Home and in the Labour Force* (Ottawa: Canadian Advisory Council on the Status of Women, 1987), p. 2.

13. Canada, Statistics Canada, "Annual Averages 1987 Moyennes annuelles", *The Labour Force: December 1987/La population active: décembre 1987*, vol. 43, no. 12 (January 1988), pp. 86-142.

14. *Ibid.*, pp. 116, 119. See also E.B. Akyeampong, "Involuntary Part-Time Employment in Canada, 1975-1986", *Canadian Social Trends* (Autumn 1987), pp. 26-29.

15. This and other trends in women's employment are outlined in H.J. Krahn and G.S. Lowe, *Work, Industry and Canadian Society* (Scarborough: Nelson Canada, 1988), chapters 2 and 5.

16. Canadian Advisory Council on the Status of Women, *Integration and Participation*, pp. 2-5. See also M. Meissner, E.W. Humphreys, S.M. Meis, and W.J. Scheu, "No Exit for Wives: Sexual Division of Labour and the Cumulation of Household Demands", *Canadian Review of Sociology and Anthropology/Revue canadienne de Sociologie et d'Anthropologie*, vol. 12, no. 4 (November 1975), pp. 424-439; M. de Koninck, "Double Work and Women's Health", *Canada's Mental Health*, vol. 32, no. 3 (1984), pp. 28-31.

17. M. Meissner, "The Domestic Economy — Half of Canada's Work: Now You See It, Now You Don't", in *Women's Worlds: From the New Scholarship*, ed. M. Safir et al. (New York: Praeger, 1985), p. 81. Data are for 1971.

18. M. Luxton and H. Rosenberg, "Introduction", in *Through the Kitchen Window: The Politics of Home and Family*, ed. M. Luxton and H. Rosenberg (Toronto: Garamond Press, 1986), pp. 9-10.

19. E.A. Cebotarev, "Women's Invisible Work", *Women's Education des femmes*, vol. 4, no. 3 (1986), pp. 18-21.

20. M. Moore, "Women Parenting Alone", *Canadian Social Trends* (Winter 1987), pp. 31-36.

21. See J.P. Grayson, *Corporate Strategies and Plant Closures: The SKF Experience* (Toronto: Our Times Publishing, 1985); P. Armstrong and H. Armstrong, "Women and the Economic Crisis", in *Working People and Hard Times*, ed. R. Argue, C. Gannagé, and D.W. Livingstone (Toronto: Garamond Press, 1986), pp. 225-246.

22. M. Killien and M.A. Brown, "Work and Family Roles of Women: Sources of Stress and Coping Strategies", *Health Care for Women International*, vol. 8, no. 2-3 (1987), pp. 169-184.

23. Some experts assert that because of its vagueness, the term stress should be abandoned altogether! T.A. Beehr and T.M. Franz, "The Current Debate About the Meaning of Job Stress", *Journal of Organizational Behavior Management*, vol. 8 (1987), pp. 5-6.

24. J.M. Stellman, *Women's Work. Women's Health: Myths and Realities* (New York: Pantheon Books, 1977), p. 53. For useful accounts of the stress process, see Cohen and White, *Playing With Our Health*, chapter 1; C.L. Cooper, R.D. Cooper, and L.H. Eaker, *Living With Stress* (London: Penguin Books, 1988).

25. Beehr and Franz, "The Current Debate About the Meaning of Job Stress", p. 6; G.S. Lowe and H.C. Northcott, *Under Pressure: A Study of Job Stress* (Toronto: Garamond Press, 1986), pp. 14-15.

26. Cox, "Editorial", p. 203.

27. S.V. Kasl, "Stress and Health", *Annual Review of Public Health*, vol. 5 (1984), pp. 331-333.

28. Haw, "Women, Work and Stress".

29. H. Selye, *Stress in Health and Disease* (Boston: Butterworths, 1976). Beehr and Franz ("The Current Debate About the Meaning of Job Stress", p. 9) document that the medical model of stress proposed by Selye and others focuses on physical stressors and strains, and targets the individual in treatment strategies. It is not primarily oriented to the workplace.

30. Selye, *Stress in Health and Disease.*

31. Beehr and Franz, "The Current Debate About the Meaning of Job Stress", pp. 7-10; B. Gardell, "Scandinavian Research on Stress in Working Life", *International Journal of Health Services*, vol. 12 (1982), pp. 31-41; D.B. Baker, "The Study of Stress at Work", *Annual Review of Public Health*, vol. 6 (1985), pp. 367-381.

32. Baker, "The Study of Stress at Work".

33. The major study in this tradition is R.D. Caplan, S. Cobb, J.R.P. French, Jr., R. van Harrison, and S.R. Pinneau, Jr., *Job Demands and Workers' Health: Main Effects and Occupational Differences* (Ann Arbor, Mich.: Survey Research Centre, Institute for Social Research, University of Michigan, 1980).

34. R.L. Kahn, "Conflict, Ambiguity, and Overload: Three Elements in Job Stress", in *The Study of Organizations*, ed. D. Katz, R.L. Kahn, and J.S. Adams (San Francisco: Jossey-Bass, 1980), pp. 418-428.

35. R.A. Karasek, "Job Demands, Job Decision Latitude, and Mental Strain: Implications for Job Redesign", *Administrative Science Quarterly*, vol. 24, no. 2 (June 1979), p. 286.

36. R.A. Karasek, B. Gardell, and J. Lindell, "Work and Non-work Correlates of Illness and Behaviour in Male and Female Swedish White-collar Workers", *Journal of Occupational Behaviour*, vol. 8 (1987), pp. 187-207.

37. National Association of Working Women, *The 9 to 5 National Survey on Women and Stress* (Cleveland: National Association of Working Women, 1984), p. 13.

38. *Ibid.*, p. 13.

39. Baruch et al., "Women and Gender in Research on Work and Family Stress", p. 131.

40. H. Rosenberg, "Motherwork, Stress, and Depression: The Costs of Privatized Social Reproduction", in *Feminism and Political Economy: Women's Work, Women's Struggles*, ed. H.J. Maroney and M. Luxton (Toronto: Methuen, 1987), p. 191.

41. This is mainly from Baker, "The Study of Stress at Work". See also S.V. Kasl, "Epidemiological Contributions to the Study of Work Stress", in *Stress at Work*, ed. C.L. Cooper and R. Payne (New York: John Wiley & Sons, 1978), pp. 3-48; C.L. Cooper and J. Marshall, "Occupational Sources of Stress: A Review of the Literature Relating to Coronary Heart Disease and Mental Ill-health", *Journal of Occupational Psychology*, vol. 49 (1976), pp. 11-28; I. Waldron, "Employment and Women's Health: An Analysis of Causal Relationships", *International Journal of Health Services*, vol. 10 (1980), pp. 435-454.

42. Based on Baker, "The Study of Stress at Work"; Kasl, "Epidemiological Contributions to the Study of Work Stress"; Caplan et al., *Job Demands and Workers' Health*; Haw, "Women, Work and Stress"; J.D. Quick, R.S. Horn, and J.C. Quick, "Health Consequences of Stress", *Journal of Organizational Behavior Management*, vol. 8 (1987), pp. 19-36; Terborg, "Working Women and Stress"; J.S. House, "Chronic Stress and Chronic Disease in Life and Work: Conceptual and Methodological Issues", *Work and Stress*, vol. 1 (1987), pp. 129-134; N. McDonald and M. Doyle, *The Stresses of Work* (Don Mills, Ontario: Nelson Canada, 1981).

43. Karasek et al., "Work and Non-work Correlates of Illness and Behaviour in Male and Female Swedish White-collar Workers"; Kasl, "Epidemiological Contributions to the Study of Work Stress", p. 4; Caplan et al., *Job Demands and Workers' Health.*

44. Job satisfaction has also been treated as a cause of stress. See, for example, J.J. Hurrell Jr. and M.J. Smith, "Sources of Stress Among Machine-paced Letter-sorting-machine Operators", in *Machine Pacing and Occupational Stress: Proceedings of the International Conference, Purdue University, March 1981*, ed. G. Salvendy and M.J. Smith (London: Taylor and Francis, 1981), pp. 253-259.

45. House, "Chronic Stress and Chronic Disease in Life and Work". There is a growing body of research showing that stress contributes to the leading causes of death — heart disease, cancer, strokes, accidents and adverse effects, and lung disease. See Quick et al., "Health Consequences of Stress", pp. 26-29.

46. Kasl, "Epidemiological Contributions to the Study of Work Stress"; House, "Chronic Stress and Chronic Disease in Life and Work"; Baker, "The Study of Stress at Work".

47. Feldberg and Glenn, "Male and Female".

48. Burke, "The Present and Future Status of Stress Research", p. 255; Haw, "Women, Work and Stress", p. 135.

49. House, "Chronic Stress and Chronic Disease in Life and Work", p. 133. See also Kasl, "Stress and Health", p. 332.

50. Terborg, "Working Women and Stress", p. 279.

51. These measures are reviewed in I. Fleming and A. Baum, "Stress: Psychobiological Assessment", *Journal of Organizational Behavior Management*, vol. 8 (1987), pp. 117-140.

52. Baker, "The Study of Stress at Work", p. 371.

53. Kasl, "Epidemiological Contributions to the Study of Work Stress", pp. 9-10.

54. National Association of Working Women, *The 9 to 5 National Survey on Women and Stress*, pp. 16-18.

55. J.S. House, A.J. McMichael, J.A. Wells, B.H. Kaplan, and L.R. Landerman, "Occupational Stress and Health Among Factory Workers", *Journal of Health and Social Behavior*, vol. 20 (1979), pp. 139-160.

56. A. Oakley, *The Sociology of Housework* (New York: Pantheon Books, 1974).

57. G. Parry and P. Warr, "The Measurement of Mothers' Work Attitudes", *Journal of Occupational Psychology*, vol. 53, no. 4 (1980), pp. 245-252.

58. Killien and Brown, "Work and Family Roles of Women". The authors recommend more work to conceptualize and measure "hassle" (p. 181).

59. Examples of nursing stress research include P. Hingley and C.L. Cooper, *Stress and the Nursing Manager* (New York: John Wiley & Sons, 1986); E.A. McConnell, ed., *Burnout in the Nursing Profession: Coping Strategies, Causes, and Costs* (St. Louis: Mosby, 1986); P. Leatt and R. Schneck, "Sources and Management of Organizational Stress in Nursing Sub-units in Canada", *Organization Studies*, vol. 6, no. 1 (1985), pp. 55-79.

60. P.J. Dewe, "Identifying the Causes of Nurses' Stress: A Survey of New Zealand Nurses", *Work and Stress*, vol. 1, no. 1 (January-March 1987), pp. 15-24. A similar measure is presented in P. Gray-Toft and J.G. Anderson, "The Nursing Stress Scale: Development of an Instrument", *Journal of Behavioural Assessment*, vol. 3, no. 1 (1981), pp. 11-23.

61. See Eichler, *Nonsexist Research Methods* (pp. 7, 94-95), on overcoming double standards in non-sexist research.

62. M. Davidson and C. Cooper, *Stress and the Woman Manager* (Oxford: Martin Robertson, 1983). Details of the interviews are reported in C.L. Cooper and M.J. Davidson, *High Pressure — Working Lives of Women Managers* (London: Fontana, 1982).

63. Davidson and Cooper, *Stress and the Woman Manager*, p. 77.

64. J.P. Newmann, "Sex Differences in Depressive Symptoms", *Research in Community and Mental Health*, vol. 4 (1984), pp. 301-323.

65. V.A. Price, *Type A Behavior Pattern: A Model for Research and Practice* (New York: Academic Press, 1982), p. 193.

66. For evidence of this, see Davidson and Cooper, *Stress and the Woman Manager*, pp. 122-123; Cooper and Davidson, *High Pressure — Working Lives of Women Managers*, pp. 173-185.

67. Price, *Type A Behavior Pattern.* One of the few measures with demonstrated validity for women is the Framingham Heart Study's Type A Scale. See S.G. Haynes and M. Feinleib, "Women, Work and Coronary Heart Disease: Prospective Findings from the Framingham Heart Study", *American Journal of Public Health*, vol. 70 (1980), pp. 133-141.

68. Burke, "The Present and Future Status of Stress Research", p. 257.

69. Matzdorff notes that many work environments and much work equipment are based on calculations of male body measurements — "Mr. Average." See I. Matzdorff, "Women at Work in Workplaces Designed for Men: Anthropometry and Ergonomics", *Work and Stress*, vol. 1, no. 3 (July-September 1987), p. 294.

70. A further measurement problem is that dependent variables (e.g., role stress, distress, dissatisfaction) and independent variables (e.g., role conflict, ambiguity, qualitative overload) are sometimes too closely operationalized. Hence, what are supposed to be independent indicators of cause and effect may be measuring the same phenomenon. See Kasl, "Epidemiological Contributions to the Study of Work Stress", pp. 12-15.

71. Hurrell and Smith, "Sources of Stress Among Machine-paced Letter-sorting-machine Operators"; G.S. Lowe and H.C. Northcott, "The Impact of Working Conditions, Social Roles, and Personal Characteristics on Gender Differences in Distress", *Work and Occupations*, vol. 15 (1988), pp. 55-77.

72. See Karasek, "Job Demands, Job Decision Latitude, and Mental Strain"; Gardell, "Scandinavian Research on Stress in Working Life".

73. Karasek, "Job Demands, Job Decision Latitude, and Mental Strain", p. 288.

74. Caplan et al., *Job Demands and Workers' Health.*

75. Canadian Labour Congress, *Toward a More Humanized Technology: Exploring the Impact of Video Display Terminals on the Health and Working Conditions of Canadian Office Workers* (Ottawa: Canadian Labour Congress, 1982).

76. Specifically, 89 per cent of VDT users compared to 75 per cent of non-VDT users had experienced one or more stress-related symptoms in the previous three months. *Ibid.*, p. 130.

77. The following examples are from B. DeMatteo, *Terminal Shock: The Health Hazards of Video Display Terminals* (Toronto: NC Press, 1985), chapter 10.

78. H. Menzies, *Computers on the Job: Surviving Canada's Microcomputer Revolution* (Toronto: James Lorimer & Co., 1982), p. 147.

79. See Cohen and White, *Playing With Our Health*, pp. 15-16; DeMatteo, *Terminal Shock*, p. 141; R. Jackson, "Electronic Surveillance", *The Facts* (January/February 1988), pp. 20-22.

80. See, for example, D.A. Buchanan and D. Boddy, "Advanced Technology and the Quality of Working Life: The Effects of Word Processing on Video Typists", *Journal of Occupational Psychology*, vol. 55 (1982), pp. 1-11.

81. DeMatteo, *Terminal Shock*, p. 141.

82. For reviews see Haw, "Women, Work and Stress"; L.M. Verbrugge, "Gender and Health: An Update of Hypothesis and Evidence", *Journal of Health and Social Behavior*, vol. 56 (1985), pp. 156-182.

83. K. Messing and J.P. Reveret, "Are Women in Female Jobs for Their Health? A Study of Working Conditions and Health Effects in the Fish-processing Industry in Quebec", *International Journal of Health Services*, vol. 13 (1983), pp. 636-648.

84. Hurrell and Smith, "Sources of Stress Among Machine-paced Letter-sorting-machine Operators".

85. R. Jenkins, "Sex Differences in Minor Psychiatric Morbidity: A Survey of a Homogeneous Population", *Social Science and Medicine*, vol. 20 (1985), pp. 887-899.

86. Another carefully designed study along the same lines is G.D. Bishop, "Gender, Role, and Illness Behavior in a Military Population", *Health Psychology*, vol. 3 (1984), pp. 519-534.

87. Lowe and Northcott, "The Impact of Working Conditions, Social Roles, and Personal Characteristics on Gender Differences in Distress".

88. Karasek et al., "Work and Non-work Correlates of Illness and Behaviour in Male and Female Swedish White-collar Workers".

89. J. Miller, C. Schooler, M.L. Kohn, and K.A. Miller, "Women and Work: The Psychological Effects of Occupational Conditions", *American Journal of Sociology*, vol. 85 (1979), pp. 66-94.

90. It should be noted that Kessler disputes this claim. He examines the relationship between socio-economic status and distress in eight epidemiological surveys. Among employed women, education is the most consistently significant predictor of distress, more so than income or occupational status. For men, income is the strongest predictor. He finds no evidence that job conditions explain the effects of education or income on emotional distress of either sex. See R.C. Kessler, "A Disaggregation of the Relationship Between Socioeconomic Status and Psychological Distress", *American Sociological Review*, vol. 47 (1982), pp. 752-764.

91. Haynes and Feinleib, "Women, Work and Coronary Heart Disease".

92. The link between a woman's employment status and her health may be confounded by other factors. What we may be observing in part is the "healthy worker effect". That is, women in relatively good health are more likely to seek employment, while women in poor health remain housewives. On this contentious hypothesis see *Ibid.*, pp. 138-139. See also Waldron ("Employment and Women's Health", pp. 437-438) for data on the effects of poor health on women's decisions to seek or leave a job. Baruch et al. ("Women and Gender in Research on Work and Family Stress", p. 132) cite new evidence that "selection" is a minor factor. In other words, employed women are not selected into this role because of better mental and physical health.

93. Karasek et al., "Work and Non-work Correlates of Illness and Behaviour in Male and Female Swedish White-collar Workers", p. 203.

94. N. Cherry, "Women and Work Stress: Evidence from the 1946 Birth Cohort", *Ergonomics*, vol. 27, no. 5 (May 1984), p. 525.

95. P. Aamondt, "Employed and Non-employed Women: Daily Hassles and Uplifts", *AAOHN Journal*, vol. 35, no. 7 (1987), pp. 315-320; Killien and Brown, "Work and Family Roles of Women".

96. J. Beck, "Problems Encountered by the Single Working Mother", *Ergonomics*, vol. 27 (1984), p. 578.

97. C.E. Smith, "Women Helping Women with the Stress of Returning to Work", *Issues in Health Care of Women*, vol. 3 (1981), pp. 277-279.

98. Canadian Human Rights Commission, Research and Special Studies Branch, *Unwanted Sexual Attention and Sexual Harassment: Results of A Survey of Canadians* (Ottawa: Supply and Services Canada, 1983).

99. P. Crull, "Stress Effects of Sexual Harassment on the Job: Implications for Counseling", *American Journal of Orthopsychiatry*, vol. 52 (1982), pp. 539-544.

100. On the Bonita Clark case, see *The Globe and Mail*, 13 September 1988; *The Toronto Star*, 8 April 1987 and 20 May 1988. On similar cases, see *The Globe and Mail*, 16 March 1987 and 8 December 1988; *The Toronto Star*, 21 August 1987.

101. Data are for 1987. Canada, Statistics Canada, "Annual Averages 1987 Moyennes annuelles", p. 116.

102. Among part-time female workers aged 25 to 54, 18.4 per cent gave personal or family reasons, and 49.4 per cent said they did not want full-time work (*Ibid.*, p. 119). See also J. White, *Women and Part-time Work* (Ottawa: Canadian Advisory Council on the Status of Women, 1983).

103. White, *Women and Part-time Work*, p. 13, and chapter 3 on part-time workers and unions.

104. L.C. Johnson and R.E. Johnson, *The Seam Allowance: Industrial Home Sewing in Canada* (Toronto: Women's Educational Press, 1982), pp. 79-81.

105. *Ibid.*, p. 86.

106. *Ibid.*, p. 80.

107. Armstrong and Armstrong, "Women and the Economic Crisis", pp. 241-243.

108. *Ibid.*, p. 242.

109. Grayson, *Corporate Strategies and Plant Closures*; J.P. Grayson, "The Closure of a Factory and its Impact on Health", in *Health and Canadian Society: Sociological Perspectives*, 2nd edition, ed. D. Coburn, C. D'Arcy, G. Torrance, and P. New (Markham, Ontario: Fitzhenry and Whiteside, 1987), pp. 262-279.

110. P. Armstrong and H. Armstrong, "The Conflicting Demands of 'Work' and 'Home'", in *Family Matters: Sociology and Contemporary Canadian Families*, ed. K.L. Anderson et al. (Toronto: Methuen, 1987), pp. 130-131.

111. R. Liem and P. Rayman, "Perspectives on Unemployment, Mental Health, and Social Policy", *International Journal of Mental Health*, vol. 13 (1984), p. 11.

112. There is a growing literature on the impact of unemployment on women. See, for example, R. Martin and J. Wallace, *Working Women in Recession: Employment, Redundancy, and Unemployment* (Oxford: Oxford University Press, 1984); C. Wallace, *For Richer, For Poorer: Growing Up In and Out of Work* (London: Tavistock, 1987).

113. P. Rayman, "Women and Unemployment", *Social Research*, vol. 54, no. 2 (Summer 1987), p. 370.

114. *Ibid.*, p. 376.

115. Maslach and Jackson define burnout as "a syndrome of emotional exhaustion, depersonalization, and reduced personal accomplishment that can occur among individuals who do 'people-work'". C. Maslach and S.E. Jackson, "The Role of Sex and Family Variables in Burnout", *Sex Roles*, vol. 12, no. 7/8 (April 1985), p. 837. See also C. Maslach, *Burnout: The Cost of Caring* (Englewood Cliffs, N.J.: Prentice-Hall, 1982).

116. National Association of Working Women, *The 9 to 5 National Survey on Women and Stress*, p. 3.

117. Evidence of this occurring in the United States is presented in N.Y. Glazer, "Overlooked, Overworked: Women's Unpaid and Paid Work in the Health Services 'Cost Crisis'", *International Journal of Health Services*, vol. 18 (1988), pp. 119-137.

118. N.M. Chenier, *Reproductive Hazards at Work: Men, Women and the Fertility Gamble* (Ottawa: Canadian Advisory Council on the Status of Women, 1982), p. 33.

119. Terborg, "Working Women and Stress", p. 273.

120. R.M. Kanter, *Men and Women of the Corporation* (New York: Basic Books, 1977).

121. Davidson and Cooper, *Stress and the Woman Manager*, p. 189.

122. Terborg, "Working Women and Stress", p. 270.

123. These comments apply equally to many professional women. For a review of this literature, see D.L. Nelson and J.C. Quick, "Professional Women: Are Distress and Disease Inevitable?", *Academy of Management Review*, vol. 10, no. 2 (1985), pp. 206-218. On female lawyers, see A. Spencer and D. Podmore, "Women in a Male-dominated Profession in England: Pressure and Strain in Family and Domestic Life", *International Journal of Sociology of the Family*, vol. 14 (1984), pp. 47-66. On female physicians, see M.A. Bowman and D.I. Allen, *Stress and Women Physicians* (New York: Springer-Verlag, 1985), pp. 34-35. Interesting profiles of Canadian managerial women coping with career and family demands are found in R. Maynard, "Thanks, But No Thanks", *Report on Business Magazine* (February 1988), pp. 26-34.

124. A.D. Berkowitz and H.W. Perkins, "Stress Among Farm Women: Work and Family as Interacting Systems", *Journal of Marriage and the Family*, vol. 46 (1984), pp. 161-166. A guide to the family stresses of farming is J.L. Walker and L.J. Walker, *The Human Harvest: Changing Farm Stress to Family Success* ([Winnipeg]: Canada-Manitoba-Agri-Food [1987]).

125. W.R. Gove and M.R. Geerken, "The Effect of Children and Employment on the Mental Health of Married Men and Women", *Social Forces*, vol. 56 (1977), pp. 66-76; P.D. Cleary and D. Mechanic, "Sex Differences in Psychological Distress Among Married People", *Journal of Health and Social Behavior*, vol. 24 (1983), pp. 111-121; C.A. Nathanson, "Sex, Illness and Medical Care: A Review of Data, Theory and Method", *Social Science and Medicine*, vol. 11 (1977), pp. 13-25; L.M. Verbrugge, "Role Burdens and Physical Health of Women and Men", *Women and Health*, vol. 11 (1986), pp. 79-98.

126. C.A. Nathanson, "Illness and the Feminine Role: A Theoretical Review", *Social Science and Medicine*, vol. 9 (1975), pp. 57-62.

127. Jick and Mitz, "Sex Differences in Work Stress", pp. 412-413.

128. S. Rosenfeld, "Sex Differences in Depression: Do Women Always Have Higher Rates?", *Journal of Health and Social Behavior*, vol. 21 (1980), pp. 33-42.

129. W.R. Gove, "The Relationship Between Sex Roles, Marital Status, and Mental Illness", *Social Forces*, vol. 51 (1972), pp. 34-44; W.R. Gove and J.F. Tudor, "Adult Sex Roles and Mental Illness", *American Journal of Sociology*, vol. 78 (1973), pp. 812-835; Gove and Geerken, "The Effect of Children and Employment on the Mental Health of Married Men and Women".

130. Criticisms are both methodological and theoretical in nature. See especially B.P. Dohrenwend and B.S. Dohrenwend, "Sex Differences and Psychiatric Disorders", *American Journal of Sociology*, vol. 81, no. 6 (May 1976), pp. 1447-1454; R.C. Kessler and J.A. McRae, Jr., "A Note on the Relationship of Sex and Marital Status to Psychological Distress", *Research in Community and Mental Health*, vol. 4 (1984), pp. 109-130.

131. Cleary and Mechanic, "Sex Differences in Psychological Distress Among Married People".

132. To support this point they cite R.E. Roberts and S.J. O'Keefe, "Sex Differences in Depression Reexamined", *Journal of Health and Social Behavior*, vol. 22 (1981), pp. 394-400.

133. S. Gore and T.W. Mangione, "Social Roles, Sex Roles and Psychological Distress: Additive and Interactive Models of Sex Differences", *Journal of Health and Social Behavior*, vol. 24 (1983), pp. 300-312.

134. Rosenfeld, "Sex Differences in Depression". For a general discussion of this issue, see L.I. Perlin, "Sex Roles and Depression", in *Life-Span Developmental Psychology: Normative Life-Crises*, ed. N. Datan and L.H. Ginsburg (New York: Academic Press, 1975), pp. 191-207.

135. A.F. Heller, *Health and Home: Women as Health Guardians* (Ottawa: Canadian Advisory Council on the Status of Women, 1986).

136. R.C. Kessler, R.L. Brown, and C.L. Broman, "Sex Differences in Psychiatric Help-seeking: Evidence from Four Large-scale Surveys", *Journal of Health and Social Behavior*, vol. 22 (1981), pp. 49-63.

137. Jick and Mitz, "Sex Differences in Work Stress", p. 415.

138. A Canadian study that makes this point is H.C. Northcott, "Women, Work, and Health", *Pacific Sociological Review*, vol. 23 (1980), pp. 393-404.

139. Baruch et al., "Women and Gender in Research on Work and Family Stress", p. 132.

140. See de Koninck, "Double Work and Women's Health".

141. Baruch et al., "Women and Gender in Research on Work and Family Stress", p. 133.

142. Killien and Brown, "Work and Family Roles of Women", pp. 170-171.

143. *Ibid.*; Baruch et al., "Women and Gender in Research on Work and Family Stress"; Aamondt, "Employed and Non-employed Women"; N.F. Woods, "Women's Lives: Pressures and Pleasure, Conflict and Support", *Health Care for Women International*, vol. 8, no. 2-3 (1987), pp. 109-119.

144. Killien and Brown, "Work and Family Roles of Women", pp. 171-172. However, Kessler and McRae's research on the impact of the division of family tasks on mental health found that employment was associated with improved mental health only among women whose husbands shared family work, especially child care. See R.C. Kessler and J.A McRae, Jr., "The Effects of Wives' Employment on the Mental Health of Married Men and Women", *American Sociological Review*, vol. 47 (1982), pp. 216-227.

145. Oakley, *The Sociology of Housework*.

146. This is echoed in H. Rosenberg, "The Home is the Workplace: Hazards, Stress and Pollutants in the Household", in *Through the Kitchen Window*, ed. M. Luxton and H. Rosenberg, pp. 41-48.

147. Baruch et al., "Women and Gender in Research on Work and Family Stress", pp. 131-132.

148. Rosenberg, "Motherwork, Stress, and Depression".

149. Woods, "Women's Lives".

150. R.C. Kessler and J. McLeod, "Social Support and Mental Health in Community Samples", in *Social Support and Health*, ed. S. Cohen and S. Syme (Orlando, Florida: Academic Press, 1985), pp. 219-240.

151. H. Levine, "When the Pressure's On", in *The Women's Workbook*, ed. P. Schom-Moffat and C. Telfer (Toronto: Between the Lines Press, 1983), p. 23.

152. Heller, *Health and Home*, p. 12.

153. C. Schooler, J. Miller, K.A. Miller, and C.A. Richtand, "Work for the Household: Its Nature and Consequences for Husbands and Wives", *American Journal of Sociology*, vol. 90 (1984), pp. 97-124.

154. M. Kohn and C. Schooler, *Work and Personality: An Inquiry into the Impact of Social Stratification* (Norwood, N.J.: Ablex, 1983).

155. M. Luxton, "Two Hands for the Clock: Changing Patterns in the Gendered Division of Labour in the Home", in *Through the Kitchen Window*, ed. M. Luxton and H. Rosenberg, p. 25.

156. Kanter, *Men and Women of the Corporation.*

157. Burke and Bradshaw, "Occupational and Life Stress and the Family", pp. 334, 346.

158. Burke, "The Present and Future Status of Stress Research", p. 255.

159. This point is made by Jick and Mitz, "Sex Differences in Work Stress", p. 417; Terborg, "Working Women and Stress", p. 279; Burke, "The Present and Future Status of Stress Research", p. 257.

160. On these concepts see T. Cox, "Stress, Coping and Problem Solving", *Work and Stress*, vol. 1, no. 1 (January-March 1987), pp. 5-14; S. Gore, "Perspectives on Social Support and Research on Stress Moderating Processes", *Journal of Organizational Behavior Management*, vol. 8 (1987), pp. 85-101; J.S. House, *Work Stress and Social Support* (Reading, Mass.: Addison-Wesley, 1981); B. Wheaton, "Models for the Stress-buffering Functions of Coping Resources", *Journal of Health and Social Behavior*, vol. 26 (1985), pp. 352-364; S. Folkman and R. Lazarus, "An Analysis of

Coping in a Middle-aged Community Sample", *Journal of Health and Social Behavior*, vol. 21 (1980), pp. 219-239.

161. M.R. Fusilier, D.C. Ganster, and B.T. Mayes, "The Social Support and Health Relationship: Is There a Gender Difference?", *Journal of Occupational Psychology*, vol. 59 (1986), pp. 145-153.

162. Haynes and Feinleib, "Women, Work and Coronary Heart Disease".

163. Gore, "Perspectives on Social Support and Research on Stress Moderating Processes", p. 94.

164. Lowe and Northcott, "The Impact of Working Conditions, Social Roles, and Personal Characteristics on Gender Differences in Distress".

165. Fusilier et al., "The Social Support and Health Relationship".

166. W.G. Brown and T. Harris, *The Social Origins of Depression* (London: Tavistock, 1978).

167. Kessler and McRae, "The Effects of Wives' Employment on the Mental Health of Married Men and Women", *American Sociological Review*, vol. 47 (1982).

168. Haw, "Women, Work and Stress", p. 141.

169. Kessler and McLeod, "Social Support and Mental Health in Community Samples".

170. National Association of Working Women, *The 9 to 5 National Survey on Women and Stress*, pp. 42-43.

171. Nelson and Quick, "Professional Women".

172. G.E. Robinson, "Helping Women Cope with a Career and a Family", *Canadian Medical Association Journal/Journal de l'Association médicale canadienne*, vol. 123, no. 8 (October 1980), pp. 712-713.

173. Rosenberg, "Motherwork, Stress, and Depression", pp. 192-194.

174. See D.C. Ganster, B.T. Mayes, W.E. Sime, and G.D. Tharp, "Managing Occupational Stress: A Field Experiment", *Journal of Applied Psychology*, vol. 62 (1982), pp. 533-542; L.R. Murphy, "Occupational Stress Management: A Review and Appraisal", *Journal of Occupational Psychology*, vol. 57 (1984), pp. 1-15; J.M. Ivancevich and M.T. Matteson, "Organizational Level Stress: Management Interventions: A Review and Recommendations", *Journal of Organizational Behavior Management*, vol. 8 (1987), pp. 229-248.

175. L. Kelly, "Workplace Stress is Compensable Ont. W.A.C.T. Decides in Landmark Ruling", *Lawyers Weekly*, 29 July 1988, pp. 14-15.

176. See McDonald and Doyle, *The Stresses of Work*; Gardell, "Scandinavian Research on Stress in Working Life"; R. Sass, "The Workers' Right to Know, Participate and Refuse Hazardous Work: A Manifesto Right", *Journal of Business Ethics*, vol. 5 (1986), pp. 129-136.

177. For a description see Lowe and Northcott, *Under Pressure*, chapter 7.

178. This legislation is discussed in Krahn and Lowe, *Work, Industry and Canadian Society*, chapter 9.

179. McDaniel, "Women, Work and Health", p. S12.

BIBLIOGRAPHY

Aamondt, P. "Employed and Non-employed Women: Daily Hassles and Uplifts". *AAOHN Journal*, vol. 35, no. 7, 1987, pp. 315-320.

Akyeampong, E.B. "Involuntary Part-time Employment in Canada, 1975-1986". *Canadian Social Trends*, Autumn 1987, pp. 26-29.

Armstrong, P. and H. Armstrong. "The Conflicting Demands of 'Work' and 'Home'". In *Family Matters: Sociology and Contemporary Canadian Families*. Ed. K.L. Anderson et al. Toronto: Methuen, 1987, pp. 113-140.

Armstrong, P. and H. Armstrong. "Women and the Economic Crisis". In *Working People and Hard Times*. Ed. R. Argue, C. Gannagé, and D.W. Livingstone. Toronto: Garamond Press, 1987, pp. 225-246.

Baker, D.B. "The Study of Stress at Work". *Annual Review of Public Health*, vol. 6, 1985, pp. 367-381.

Baruch, G.L., L. Biener, and R.C. Barnett. "Women and Gender in Research on Work and Family Stress". *American Psychologist*, vol. 42, no. 2, February 1987, pp. 130-136.

Beck, J. "Problems Encountered by the Single Working Mother". *Ergonomics*, vol. 27, 1984, pp. 577-584.

Beechey, V. *Unequal Work*. London: Verso, 1987.

Beehr, T.A. and T.M. Franz. "The Current Debate About the Meaning of Job Stress". *Journal of Organizational Behavior Management*, vol. 8, 1987, pp. 5-18.

Berkowitz, A.D. and H.W. Perkins. "Stress Among Farm Women: Work and Family as Interacting Systems". *Journal of Marriage and the Family*, vol. 46, 1984, pp. 161-166.

Bishop, G.D. "Gender, Role, and Illness Behavior in a Military Population". *Health Psychology*, vol. 3, 1984, pp. 519-534.

Bowman, M.A. and D.I. Allen. *Stress and Women Physicians*. New York: Springer-Verlag, 1985.

Brown, W.G. and T. Harris. *The Social Origins of Depression*. London: Tavistock, 1978.

Buchanan, D.A. and D. Boddy. "Advanced Technology and the Quality of Working Life: The Effects of Word Processing on Video Typists". *Journal of Occupational Psychology*, vol. 55, 1982, pp. 1-11.

Burke, R.J. "The Present and Future Status of Stress Research". *Journal of Organizational Behavior Management*, vol. 8, 1987, pp. 249-267.

Burke, R.J. and P. Bradshaw. "Occupational and Life Stress and the Family". *Small Group Behavior*, vol. 12, 1981, pp. 329-375.

Canada. Statistics Canada. "Annual Averages 1987 Moyennes annuelles". *The Labour Force: December 1987/La Population active: décembre 1987*, vol. 43, no. 12, January 1988, pp. 86-142.

Canadian Advisory Council on the Status of Women. *Integration and Participation: Women's Work in the Home and in the Labour Force*. Ottawa: Canadian Advisory Council on the Status of Women, 1987.

Canadian Human Rights Commission. Research and Special Studies Branch. *Unwanted Sexual Attention and Sexual Harassment: Results of A Survey of Canadians*. Ottawa: Supply and Services Canada, 1983.

Canadian Labour Congress. *Toward a More Humanized Technology: Exploring the Impact of Video Display Terminals on the Health and Working Conditions of Canadian Office Workers*. Ottawa: Canadian Labour Congress, 1982.

Caplan, R.D., S. Cobb, J.R.P French, Jr., R. van Harrison, and S.R. Pinneau, Jr. *Job Demands and Workers' Health: Main Effects and Occupational Differences*. Ann Arbor, Mich.: Survey Research Centre, Institute for Social Research, University of Michigan, 1980.

Cebotarev, E.A. "Women's Invisible Work". *Women's Education des femmes*, vol. 4, no. 3, 1986, pp. 18-21.

Chenier, N.M. *Reproductive Hazards at Work: Men, Women and the Fertility Gamble*. Ottawa: Canadian Advisory Council on the Status of Women, 1982.

Cherry, N. "Women and Work Stress: Evidence From the 1946 Birth Cohort". *Ergonomics*, vol. 27, no. 5, May 1984, pp. 519-526.

Cleary, P.D. and D. Mechanic. "Sex Differences in Psychological Distress Among Married People". *Journal of Health and Social Behavior*, vol. 24, 1983, pp. 111-121.

Cohen, M. and M. White. *Playing With Our Health: Hazards in the Automated Office*. Vancouver: Press Gang Printers, 1986.

Cooper, C.L. and J. Marshall. "Occupational Sources of Stress: A Review of the Literature Relating to Coronary Heart Disease and Mental Ill-health". *Journal of Occupational Psychology*, vol. 49, 1976, pp. 11-28.

Cooper, C.L. and M.J. Davidson. *High Pressure — Working Lives of Women Managers*. London: Fontana, 1982.

Cooper, C.L., R.D. Cooper, and L.H. Eaker. *Living With Stress*. London: Penguin Books, 1988.

Cox, T. "Stress, Coping and Problem Solving". *Work and Stress*, vol. 1, no. 1, January-March 1987, pp. 5-14.

Cox, T. "Editorial: Women and Work". *Work and Stress*, vol. 1, no. 3, July-September 1987, pp. 203-206.

Crull, P. "Stress Effects of Sexual Harassment on the Job: Implications for Counseling". *American Journal of Orthopsychiatry*, vol. 52, 1982, pp. 539-544.

Davidson, M. and C. Cooper. *Stress and the Woman Manager*. Oxford: Martin Robertson, 1983.

de Koninck, M. "Double Work and Women's Health". *Canada's Mental Health*, vol. 32, no. 3, 1984, pp. 28-31.

DeMatteo, B. *Terminal Shock: The Health Hazards of Video Display Terminals*. Toronto: NC Press, 1985.

Dewe, P.J. "Identifying the Causes of Nurses' Stress: A Survey of New Zealand Nurses". *Work and Stress*, vol. 1, no. 1, January-March 1987, pp. 15-24.

Dohrenwend, B.P. and B.S. Dohrenwend. "Sex Differences and Psychiatric Disorders". *American Journal of Sociology*, vol. 81, no. 6, May 1976, pp. 1447-1454.

Eichler, M. *Nonsexist Research Methods: A Practical Guide*. Boston: Allen & Unwin, 1988.

Feldberg, R.L. and E.N. Glenn. "Male and Female: Job Versus Gender Models in the Sociology of Work". *Social Problems*, vol. 26, 1979, pp. 524-538.

Fleming, I. and A. Baum. "Stress: Psychobiological Assessment". *Journal of Organizational Behavior Management*, vol. 8, 1987, pp. 7-140.

Folkman, S. and R. Lazarus. "An Analysis of Coping in a Middle-aged Community Sample". *Journal of Health and Social Behavior*, vol. 21, 1980, pp. 219-239.

Fusilier, M.R., D.C. Ganster, and B.T. Mayes. "The Social Support and Health Relationship: Is There a Gender Difference?". *Journal of Occupational Psychology*, vol. 59, 1986, pp. 145-153.

Ganster, D.C., B.T. Mayes, W.E. Sime, and G.D. Tharp. "Managing Occupational Stress: A Field Experiment". *Journal of Applied Psychology*, vol. 62, 1982, pp. 533-542.

Gardell, B. "Scandinavian Research on Stress in Working Life". *International Journal of Health Services*, vol. 12, 1982, pp. 31-41.

Glazer, N.Y. "Overlooked, Overworked: Women's Unpaid and Paid Work in the Health Services 'Cost Crisis'". *International Journal of Health Services*, vol. 18, 1988, pp. 119-137.

The Globe and Mail, 3 March 1984; 16 March 1987; 13 September 1988; 8 December 1988.

Gore, S. "Perspectives on Social Support and Research on Stress Moderating Processes". *Journal of Organizational Behavior Management*, vol. 8, 1987, pp. 85-101.

Gore, S. and T.W. Mangione. "Social Roles, Sex Roles and Psychological Distress: Additive and Interactive Models of Sex Differences". *Journal of Health and Social Behavior*, vol. 24, 1983, pp. 300-312.

Gove, W.R. "The Relationship Between Sex Roles, Marital Status, and Mental Illness". *Social Forces*, vol. 51, 1972, pp. 34-44.

Gove, W.R. and J.F. Tudor. "Adult Sex Roles and Mental Illness". *American Journal of Sociology*, vol. 78, 1973, pp. 812-835.

Gove, W.R. and M.P. Geerken. "The Effect of Children and Employment on the Mental Health of Married Men and Women". *Social Forces*, vol. 56, 1977, pp. 66-76.

Gray-Toft, P. and J.G. Anderson. "The Nursing Stress Scale: Development of an Instrument". *Journal of Behavioural Assessment*, vol. 3, no. 1, 1981, pp. 11-23.

Grayson, J.P. *Corporate Strategies and Plant Closures: The SKF Experience*. Toronto: Our Times Publishing, 1985.

Grayson, J.P. "The Closure of a Factory and its Impact on Health". In *Health and Canadian Society: Sociological Perspectives*. 2nd ed. Ed. D. Coburn, C. D'Arcy, G. Torrance, and P. New. Markham, Ontario: Fitzhenry and Whiteside, 1987, pp. 262-279.

Haw, M.A. "Women, Work and Stress: A Review and Agenda for the Future". *Journal of Health and Social Behavior*, vol. 23, 1982, pp. 132-144.

Haynes, S.G. and M. Feinleib. "Women, Work and Coronary Heart Disease: Prospective Findings From the Framingham Heart Study". *American Journal of Public Health*, vol. 70, 1980, pp. 133-141.

Hearn, J. and P.W. Parkin. "Gender in Organizations: A Selective Review and a Critique of a Neglected Area". *Organization Studies*, vol. 4, no. 4, 1983, pp. 219-242.

Heller, A.F. *Health and Home: Women as Health Guardians*. Ottawa: Canadian Advisory Council on the Status of Women, 1986.

Hingley, P. and C.L. Cooper. *Stress and the Nursing Manager*. New York: John Wiley & Sons, 1986.

House, J.S. *Work Stress and Social Support*. Reading, Mass.: Addison-Wesley, 1981.

House, J.S. "Chronic Stress and Chronic Disease in Life and Work: Conceptual and Methodological Issues". *Work and Stress*, vol. 1, 1987, pp. 129-134.

House, J.S., A.J. McMichael, J.A. Wells, B.H. Kaplan, and L.R. Landerman. "Occupational Stress and Health Among Factory Workers". *Journal of Health and Social Behavior*, vol. 20, 1979, pp. 139-160.

Hurrell, J.J., Jr. and M.J. Smith. "Sources of Stress Among Machine-paced Letter-sorting-machine Operators". In *Machine Pacing and Occupational Stress: Proceedings of the International Conference, Purdue University, March 1981*, Ed. G. Salvendy and M.J. Smith. London: Taylor and Francis, 1981, pp. 253-259.

Ivancevich, J.M. and M.T. Matteson. "Organizational Level Stress: Management Interventions: A Review and Recommendations". *Journal of Organizational Behavior Management*, vol. 8, 1987, pp. 229-248.

Jackson, R. "Electronic Surveillance". *The Facts*, January/February 1988, pp. 20-22.

Jenkins, R. "Sex Differences in Minor Psychiatric Morbidity: A Survey of a Homogeneous Population". *Social Science and Medicine*, vol. 20, 1985, pp. 887-899.

Jick, T.D. and L.F. Mitz. "Sex Differences in Work Stress". *Academy of Management Review*, vol. 10, 1985, pp. 408-420.

Johnson, L.C. and R.E. Johnson. *The Seam Allowance: Industrial Home Sewing in Canada*. Toronto: Women's Educational Press, 1982.

Kahn, R.L. "Conflict, Ambiguity, and Overload: Three Elements in Job Stress". In *The Study of Organizations*. Ed. D. Katz, R.L. Kahn, and J.S. Adams. San Francisco: Jossey-Bass, 1980, pp. 418-428.

Kanter, R.M. *Men and Women of the Corporation*. New York: Basic Books, 1977.

Karasek, R.A. "Job Demands, Job Decision Latitude, and Mental Strain: Implications for Job Redesign". *Administrative Science Quarterly*, vol. 24, no. 2, June 1979, pp. 285-308.

Karasek, R.A., B. Gardell, and J. Lindell. "Work and Non-work Correlates of Illness and Behaviour in Male and Female Swedish White-collar Workers". *Journal of Occupational Behaviour*, vol. 8, 1987, pp. 187-207.

Kasl, S.V. "Epidemiological Contributions to the Study of Work Stress". In *Stress at Work*. Ed. C.L. Cooper and R. Payne. New York: John Wiley & Sons, 1978, pp. 3-48.

Kasl, S.V. "Stress and Health". *Annual Review of Public Health*, vol. 5, 1984, pp. 319-341.

Kelly, L. "Workplace Stress is Compensable Ont. W.A.C.T. Decides in Landmark Ruling". *Lawyers Weekly*, 29 July 1988, pp. 14-15.

Kessler, R.C. "A Disaggregation of the Relationship Between Socioeconomic Status and Psychological Distress". *American Sociological Review*, vol. 47, 1982, pp. 752-764.

Kessler, R.C., R.L. Brown, and C.L. Broman. "Sex Differences in Psychiatric Help-seeking: Evidence From Four Large-scale Surveys". *Journal of Health and Social Behavior*, vol. 22, 1981, pp. 49-63.

Kessler, R.C. and J.A McRae, Jr. "The Effects of Wives' Employment on the Mental Health of Married Men and Women". *American Sociological Review*, vol. 47, 1982, pp. 216-227.

Kessler, R.C. and J.A. McRae, Jr. "A Note on the Relationship of Sex and Marital Status to Psychological Distress". *Research in Community and Mental Health*, vol. 4, 1984, pp. 109-130.

Kessler, R.C. and J. McLeod. "Social Support and Mental Health in Community Samples". In *Social Support and Health*. Ed. S. Cohen and S. Syme. Orlando, Florida: Academic Press, 1985, pp. 219-240.

Killien, M. and M.A. Brown. "Work and Family Roles of Women: Sources of Stress and Coping Strategies". *Health Care for Women International*, vol. 8, no. 2-3, 1987, pp. 169-184.

Kohn, M. and C. Schooler. *Work and Personality: An Inquiry into the Impact of Social Stratification*. Norwood, N.J.: Ablex, 1983.

Krahn, H.J. and G.S. Lowe. *Work, Industry and Canadian Society*. Scarborough: Nelson Canada, 1988.

Leatt, P. and R. Schneck. "Sources and Management of Organizational Stress in Nursing Sub-units in Canada". *Organization Studies*, vol. 6, no. 1, 1985, pp. 55-79.

Levine, H. "When the Pressure's On". In *The Women's Workbook*. Ed. P. Schom-Moffat and C. Telfer. Toronto: Between the Lines Press, 1983, pp. 21-30.

Liem, R. and P. Rayman. "Perspectives on Unemployment, Mental Health, and Social Policy". *International Journal of Mental Health*, vol. 13, 1984, pp. 3-17.

Lowe, G.S. and H.C. Northcott. *Under Pressure: A Study of Job Stress*. Toronto: Garamond Press, 1986.

Lowe, G.S. and H.C. Northcott. "The Impact of Working Conditions, Social Roles, and Personal Characteristics on Gender Differences in Distress". *Work and Occupations*, vol. 15, 1988, pp. 55-77.

Luxton, M. "Two Hands for the Clock: Changing Patterns in the Gendered Division of Labour in the Home". In *Through the Kitchen Window: The Politics of Home and Family*. Ed. M. Luxton and H. Rosenberg. Toronto: Garamond Press, 1986, pp. 17-36.

Luxton, M. and H. Rosenberg. "Introduction". In *Through the Kitchen Window: The Politics of Home and Family*. Ed. M. Luxton and H. Rosenberg. Toronto: Garamond Press, 1986, pp. 9-15.

Martin, R. and J. Wallace. *Working Women in Recession: Employment, Redundancy, and Unemployment*. Oxford: Oxford University Press, 1984.

Maslach, C. *Burnout: The Cost of Caring*. Englewood Cliffs, N.J.: Prentice-Hall, 1982.

Maslach, C. and S.E. Jackson. "The Role of Sex and Family Variables in Burnout". *Sex Roles*, vol. 12, no. 7/8, April 1985, pp. 837-851.

Matzdorff, I. "Women at Work in Workplaces Designed For Men: Anthropometry and Ergonomics". *Work and Stress*, vol. 1, no. 3, July-September 1987, pp. 293-297.

Maynard, R. "Thanks, But No Thanks". *Report on Business Magazine*, February 1988, pp. 26-34.

McConnell, E.A., ed. *Burnout in the Nursing Profession: Coping Strategies, Causes, and Costs*. St. Louis: Mosby, 1986.

McDaniel, S.A. "Women, Work and Health: Some Challenges to Health Promotion". *Canadian Journal of Public Health/Revue canadienne d'hygiène publique*, vol. 78, no. 5, September/October 1987, pp. S9-S13.

McDonald, N. and M. Doyle. *The Stresses of Work*. Don Mills, Ontario: Nelson Canada, 1981.

Meissner, M. "The Domestic Economy — Half of Canada's Work: Now You See It, Now You Don't". In *Women's Worlds: From the New Scholarship*. Ed. M. Safir et al. New York: Praeger, 1985, pp. 71-83.

Meissner, M., E.W. Humphreys, S.M. Meis, and W.J. Scheu. "No Exit for Wives: Sexual Division of Labour and the Cumulation of Household Demands". *Canadian Review of Sociology and Anthropology/Revue canadienne de Sociologie et d'Anthropologie*, vol. 12, no. 4, November 1975, pp. 424-439.

Menzies, H. *Computers on the Job: Surviving Canada's Microcomputer Revolution*. Toronto: James Lorimer & Co., 1982.

Messing, K. "Do Men and Women Have Different Jobs Because of Their Biological Differences?". In *Women and Men: Interdisciplinary Readings on Gender*. Ed. G.H. Nemiroff. [Toronto]: Fitzhenry & Whiteside, 1987, pp. 341-353.

Messing, K. and J.P. Reveret. "Are Women in Female Jobs for Their Health? A Study of Working Conditions and Health Effects in the Fish-processing Industry in Quebec". *International Journal of Health Services*, vol. 13, 1983, pp. 636-648.

Miller, J., C. Schooler, M.L. Kohn, and K.A. Miller. "Women and Work: The Psychological Effects of Occupational Conditions". *American Journal of Sociology*, vol. 85, 1979, pp. 66-94.

Moore, M. "Women Parenting Alone". *Canadian Social Trends*, Winter 1987, pp. 31-36.

Murphy, L.R. "Occupational Stress Management: A Review and Appraisal". *Journal of Occupational Psychology*, vol. 57, 1984, pp. 1-15.

Nathanson, C.A. "Illness and the Feminine Role: A Theoretical Review". *Social Science and Medicine*, vol. 9, 1975, pp. 57-62.

Nathanson, C.A. "Sex, Illness and Medical Care: A Review of Data, Theory and Method". *Social Science and Medicine*, vol. 11, 1977, pp. 13-25.

National Association of Working Women. *The 9 to 5 National Survey on Women and Stress*. Cleveland: National Association of Working Women, 1984.

Nelson, D.L. and J.C. Quick. "Professional Women: Are Distress and Disease Inevitable?". *Academy of Management Review*, vol. 10, no. 2, 1985, pp. 206-218.

Newmann, J.P. "Sex Differences in Depressive Symptoms". *Research in Community and Mental Health*, vol. 4, 1984, pp. 301-323.

Northcott, H.C. "Women, Work, and Health". *Pacific Sociological Review*, vol. 23, 1980, pp. 393-404.

Oakley, A. *The Sociology of Housework*. New York: Pantheon Books, 1974.

Parry, G. and P. Warr. "The Measurement of Mothers' Work Attitudes". *Journal of Occupational Psychology*, vol. 53, no. 4, 1980, pp. 245-252.

Perlin, L.I. "Sex Roles and Depression". In *Life-Span Developmental Psychology: Normative Life Crises*. Ed. N. Datan and L.H. Ginsburg. New York: Academic Press, 1975, pp. 191-207.

Price, V.A. *Type A Behavior Pattern: A Model for Research and Practice*. New York: Academic Press, 1982.

Quick, J.D., R.S. Horn, and J.C. Quick. "Health Consequences of Stress". *Journal of Organizational Behavior Management*, vol. 8, 1987, pp. 19-36.

Rayman, P. "Women and Unemployment". *Social Research*, vol. 54, no. 2, Summer 1987, pp. 355-376.

Roberts, R.E. and S.J. O'Keefe. "Sex Differences in Depression Reexamined". *Journal of Health and Social Behavior*, vol. 22, 1981, pp. 394-400.

Robinson, G.E. "Helping Women Cope With a Career and a Family". *Canadian Medical Association Journal/Journal de l'Association médicale canadienne*, vol. 123, no. 8, October 1980, pp. 712-713.

Rosenberg, H. "The Home is the Workplace: Hazards, Stress and Pollutants in the Household". In *Through the Kitchen Window: The Politics of Home and Family*. Ed. M. Luxton and H. Rosenberg. Toronto: Garamond Press, 1986, pp. 37-61.

Rosenberg, H. "Motherwork, Stress, and Depression: The Costs of Privatized Social Reproduction". In *Feminism and Political Economy: Women's Work, Women's Struggles*. Ed. H.J. Maroney and M. Luxton. Toronto: Methuen, 1987, pp. 181-196.

Rosenfeld, S. "Sex Differences in Depression: Do Women Always Have Higher Rates?". *Journal of Health and Social Behavior*, vol. 21, 1980, pp. 33-42.

Sass, R. "The Workers' Right to Know, Participate and Refuse Hazardous Work: A Manifesto Right". *Journal of Business Ethics*, vol. 5, 1986, pp. 129-136.

Schooler, C., J. Miller, K.A. Miller, and C.A. Richtand. "Work for the Household: Its Nature and Consequences for Husbands and Wives". *American Journal of Sociology*, vol. 90, 1984, pp. 97-124.

Selye, H. *Stress in Health and Disease*. Boston: Butterworths, 1976.

Smith, C.E. "Women Helping Women With the Stress of Returning to Work". *Issues in Health Care of Women*, vol. 3, 1981, pp. 277-279.

Spencer, A. and D. Podmore. "Women in a Male-dominated Profession in England: Pressure and Strain in Family and Domestic Life". *International Journal of Sociology of the Family*, vol. 14, 1984, pp. 47-66.

Stacey, J. and B. Thorne. "The Missing Feminist Revolution in Sociology". *Social Problems*, vol. 32, 1985, pp. 301-316.

Stellman, J.M. *Women's Work, Women's Health: Myths and Realities*. New York: Pantheon Books, 1977.

Terborg, J.R. "Working Women and Stress". In *Human Stress and Cognition in Organizations*. Ed. T.A. Beehr and R.S. Bhagat. New York: John Wiley & Sons, 1985, pp. 245-286.

Toronto Star, 8 April 1987; 21 August 1987; 20 May 1988.

Verbrugge, L.M. "Gender and Health: An Update of Hypothesis and Evidence". *Journal of Health and Social Behavior*, vol. 56, 1985, pp. 156-182.

Verbrugge, L.M. "Role Burdens and Physical Health of Women and Men". *Women and Health*, vol. 11, 1986, pp. 79-98.

Waldron, I. "Employment and Women's Health: An Analysis of Causal Relationships". *International Journal of Health Services*, vol. 10, 1980, pp. 435-454.

Walker, J.L. and L.J. Walker. *The Human Harvest: Changing Farm Stress to Family Success*. [Winnipeg]: Canada-Manitoba-Agri-Food [1987].

Wallace, C. *For Richer, For Poorer: Growing Up In and Out of Work*. London: Tavistock, 1987.

Wheaton, B. "Models for the Stress-buffering Functions of Coping Resources". *Journal of Health and Social Behavior*, vol. 26, 1985, pp. 352-364.

White, J. *Women and Part-time Work*. Ottawa: Canadian Advisory Council on the Status of Women, 1983.

Woods, N.F. "Women's Lives: Pressures and Pleasure, Conflict and Support". *Health Care for Women International*, vol. 8, no. 2-3, 1987, pp. 109-119.

The Canadian Advisory Council on the Status of Women (CACSW) was established in 1973 as an independent organization funded by the federal government. The Council's mandate is to advise the government and inform the public on matters of concern to women.

The CACSW produces in-depth research on a wide variety of issues affecting women and publishes these findings as books, booklets, background papers, briefs and fact sheets.

All publications are available free of charge.

NATIONAL OFFICE
110 O'Connor Street,
9th floor,
Box 1541,
Station B,
Ottawa, Ontario
K1P 5R5
(613) 992-4976

REGIONAL OFFICES
2021 Union Avenue,
Suite 875
Montreal, Quebec
H3A 2S9
(514) 283-3123

220-4th Avenue S.E.,
Suite 270,
Box 1390,
Station M,
Calgary, Alberta
T2P 2L6
(403) 292-6668

Le Conseil consultatif canadien sur la situation de la femme (CCCSF), créé en 1973, est un organisme indépendant financé par le gouvernement fédéral. Il a pour mandat de conseiller le gouvernement et d'informer le public sur les questions qui préoccupent les femmes.

Le CCCSF mène des recherches approfondies sur un éventail de sujets liés à la condition féminine et en assure la publication sous forme de livres, brochures, documents de référence, mémoires et feuillets documentaires.

Toutes les publications sont offertes gratuitement dans les deux langues officielles.

BUREAU CENTRAL
110, rue O'Connor
9e étage
C.P. 1541, succursale B
Ottawa (Ontario)
K1P 5R5
(613) 992-4976

BUREAUX RÉGIONAUX
2021, avenue Union
pièce 875
Montréal (Québec)
H3A 2S9
(514) 283-3123

220, 4ième avenue S.E.
pièce 270
C.P. 1390, succursale M
Calgary (Alberta)
T2P 2L6
(403) 292-6668

Canadian Advisory Council on the Status of Women

Conseil consultatif canadien sur la situation de la femme

STRESS
BP 1989